Introduction to BUSINESS FINANCE

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To

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PREFACE

For some years now increasing interest has been evidenced among both academicians and practitioners in a new approach to the teaching of business finance. Both formal and informal conferences have been held on the subject at the annual meetings of the American Finance Association; various collegiate schools of business administration have experimented with new materials and courses; and quite a few finance texts introducing somewhat different approaches have appeared since the conclusion of the Second World War.

The essence of the feeling among those who have expressed themselves in favor of a change from the traditional corporation finance course is that this approach is neither suited to the experience of the typical undergraduate student nor consistent with the objectives of collegiate education in business. The subject matter tends to be too sophisticated in nature by being too concerned with the financing of large corporations. Also, by concentrating on the institutions and instruments of corporate finance, the standard texts and courses have been more introductory to the general subject of investments than to business finance.

Since *finance* is one of the major administrative functions in business, along with *production* and *marketing*, it would seem reasonable to teach it from the administrative standpoint. And since the beginning course in any subject should be generic in nature rather than specific, the subject matter should not be concerned with only one type of business organization, *e.g.*, the corporation. The focal point should be that of financial management, the principles, institutions, and instruments of which might be transferred to any type of business enterprise and applied to any situation. Finally, such an approach is more consistent with that of other basic business courses and therefore is more easily comprehended by the student.

The texts that have appeared in recent years have not fully satisfied the need for materials consistent with this approach. One tangent of such finance books has been in the direction of developing the corporation as a social institution, an approach even further away from the internal management approach. These books are more socioeconomic than administrative in nature and therefore necessarily assume substantial prior knowledge on the part of the student as to the operation of the individual firm. Another tangent has been toward developing the special financial operations and problems of small business. By thus concentrating on only one type of business organization, these texts are subject to one of the major criticisms of the traditional corporation finance texts—

too limited in application. Where concern for the small business has been centered around the managerial approach, the results are satisfactory, but too often the books have merely followed the traditional pattern, while using the small business situation as the point of reference.

It is the hope of the authors that this book goes further than others in the direction of establishing a generic and consistent managerial approach to business finance. It represents the culmination of some eight years of experimentation at Northwestern University, during which time there was constant revision of organization and material. It has been used in preliminary style in the basic finance courses at Northwestern and Washington Universities and a few other cooperating institutions. But despite this caution and experimentation, the authors have no illusions that further improvements are not possible.

The authors are anxious to express their deep gratitude to those whose invaluable suggestions have contributed to the development of this book. The students, academicians, and others to whom the authors are indebted in this way are too numerous to mention by name, but the authors cannot possibly pass by this opportunity to single out those who have been most helpful. First and foremost are those of their colleagues at Northwestern and Washington who have shared with them their experiences in using the material in class or have voluntarily read and criticized different sections. Most notable among these are Harry G. Guthmann, Paul L. Morrison, Harold W. Torgerson, Roland I. Robinson, Homer V. Cherrington, Frank H. Gane, Loring C. Farwell, Thomas J. McNichols, Ralph G. Ringgenberg, Warren Browne, Carl Dauten, Charles Gilliland, and Robert Oppitz. Eric Vance of Rochester University, Donald Halley of Tulane University, Francis Calkins of Marquette University, Roderick F. McDonald of Michigan State College, and Arthur H. Bradley, formerly of Utica College, are the teachers at other institutions who must be singled out for their special contribution. And, as ever, development to the present stage would have been impossible without that all-important stenographic assistance which, though contributed by many, has been most consistently and cooperatively provided by Mrs. Mildred E. Johnson.

The authors sincerely hope that their efforts as represented by this work justify the time and effort spent by these friends and the cooperative spirit they have regularly shown. Whatever shortcomings exist, however, are of the authors' own doing, and they must assume full responsibility for them.

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St. Louis, Mo.
October, 1952

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PART I

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Chapter 1. THE MEANING AND SCOPE OF BUSINESS FINANCE

The Meaning of Finance

Since this book is entitled *Introduction to Business Finance,* it is well to establish at the very beginning the area encompassed by the term "business finance." This could be accomplished by a succinct and formal definition, but though the desire for academic precision might be served thereby, the reader would probably be little or no better off than if no attempt at all had been made. The purpose of this chapter, therefore, is to try to introduce the reader to the whole field by talking briefly about the major aspects of the subject. In this way it is hoped that he will acquire some general appreciation of what the over-all subject is about, so that the future discussions of subsidiary aspects will be seen in a clearer light. The chapter should also serve as a continual point of reference for the reader to use later, when he feels that he needs to regain perspective.

Before the meaning of business finance can be developed, however, appreciation of the meaning of finance itself is necessary. In its simplest sense *finance* refers to those activities involved in seeing that an individual or organization has the cash with which to pay its bills promptly. Although this statement is inadequate in that it fails to suggest to the reader the myriad of duties which must be performed in order to carry out such a seemingly simple task, it has the virtue of quickly focusing attention on the central concept. The *Encyclopaedia Britannica* attempts to convey the idea as follows: [1]

> Without suggesting that a word of such extensive practical application can be adequately defined by any simple formula, we may indicate its significance by saying that finance is "the act of providing the means of payment." The immediate aim thereby assigned to finance in any business is simply that of maintaining at all times an adequate cash balance (in money or bank credit). But the means employed include all the multifarious methods of borrowing money and of exchanging one sort of pecuniary right against another.

For the purpose of the present text we shall broaden the concept somewhat by defining finance as that administrative area or set of administrative functions in an organization which have to do with the

[1] *Encyclopaedia Britannica,* 1946 ed., Vol. 9, pp. 240–241.

management of the flow of cash so that the organization will have the means to carry out its objective as satisfactorily as possible and at the same time meet its obligations as they become due. And in order to give more concreteness to this formal definition, we may establish the chief activities necessary to successful administration of the finances of any organization as follows:

1. *Financial planning,* or estimating and planning for the future flow of cash receipts and disbursements. The methods of planning expenditures for equipment, stocks of merchandise, and current expenses so that they will be in keeping with need and not be beyond the probable means to pay are fundamental to any financial management. Small businesses in particular sometimes show a Micawber-like hopefulness that "something will turn up." That such unreasoned optimism is no basis for a business is partially found in the high bankruptcy rate for small concerns.

2. *Financing,* or raising the needed funds not available from ordinary day-to-day receipts to carry on operations. A major part of any study on financial management has to do with the financial instruments and the institutions through which an organization can raise funds if it can meet the customary standards imposed by the market.

3. *Financial control,* or checking the past and current operations and disbursements so as to ensure that the cash flow is proceeding according to plan or that deviations are handled in a manner compatible with continued financial health of the business. Such control is especially necessary for two reasons: one is the human tendency to be swayed from original plans by day-to-day events, forgetting how such variations may defeat an over-all plan that must be followed to keep disbursements within receipts; and the other is the constant ups and downs of changing business conditions that require continuing modification of one's plans to keep step. Business recession, for example, may shrink sales below estimated figures and require a prompt contraction of purchases and expenses.

For the sake of completeness in exposition, other functions or activities may be added to this basic list; but careful study will reveal that they are subsidiary points. Thus, the disposition of any profits or surplus is closely related to financing and financial control. A business may choose to distribute profits as an aid to financing, or it may retain profits and so avoid outside financing. A nonprofit educational institution may avoid or minimize a surplus by careful financial planning. It might, however, plan for a surplus in years of prosperity to cover expected deficits in hard times. We shall discover, further, that financial

planning is a prime requisite to financial control, but it also is important to sound financing and an appropriate use of funds and so is of such individual stature as to require separate consideration.

Categories of Finance

The general subject of finance is customarily divided into categories according to the type of entity or organization served. The first major classification of this sort is twofold: public finance and private finance. The former has to do with the financial requirements, receipts, and disbursements of such governmental bodies as nations, states, and municipalities. Private finance is generally subdivided further into personal finance, business finance, and the finance of nonprofit organizations. Personal finance is concerned with the fundamentals of managing one's own day-to-day money affairs. Business finance covers the financial management of private profit-seeking concerns in the fields of service, trade, manufacturing, mining, public utilities, and financing. The nonprofit organizations would include private undertakings in such fields as education, charity, and religion.

It is the purpose of this text to devote attention to the particular field of business finance, to bring forth the activities and principles involved in the financial administrative function of business in general, and to point up the skills and understanding required to perform successfully the responsibilities imposed. In a broad sense, as already shown, the principles and requirements of financial administration are the same regardless of the particular type of unit involved; the selection of the medium for discussion, that is, a person, a governmental body, a profit or nonprofit organization, is therefore largely arbitrary. There are sufficient differences of a specific operating nature, however, to justify separate consideration; and since the practical application of the principles of sound finance requires constant reference to the peculiar needs of the entity involved and the particular institutions which serve these needs, any book must be confined to a single field of finance to have practical use. Even the field of business finance is so broad as to limit a single text, such as this, to the fundamentals of principle and practice and to ignore a wide range of interesting practical problems which have been deemed less essential than the ones selected here for illustrative purposes.

The subject of business finance is often studied as "corporation finance." The tendency in such treatments is to concentrate attention on the financial problems of the incorporated business. The emphasis,

furthermore, tends to be laid on financing (point 2 above) and to give little or no consideration to financial planning and financial control. In dealing with such financing, the material usually concentrates further upon the long-term, or stock and bond, financing peculiar to the corporation. In such a treatment there is the possibility that a substantial part of the content will be limited to a description of the forms and institutions and too little devoted to the underlying principles of financial management, which are equally applicable for the corporation or unincorporated business. In short, our concern here is with the principles of business finance in general, not the practices of corporation finance in particular.

The Need for an Appreciation of Business Financial Principles

A reasonably shrewd observer of business affairs would be inclined to smile indulgently at the optimistic statement attributed to Emerson: "If a man builds a better mousetrap, the world will beat a path to his door." A businessman will have met with too many cases where meritorious contrivances have languished because their promoters lacked sufficient marketing ability to let the world know about their superior mousetrap. Suitable signposts are essential if the world is to find the path to the right door. Similarly, worthy ideas have failed for lack of money or bad financial management.

All too often the nonbusiness world is inclined to overrate the economic contributions of the "producer" and to ignore the equally essential contributions of marketing and financial administration in making possible the huge volume of goods and services that constitutes the American high standard of living. This comment is merely another way of stating the general business precept that a successful business unit must be efficient in all three areas of management: production, marketing, and finance.

Accordingly, many concerns whose primary problem is production or marketing do an excellent and efficient job on those scores but the businesses fail as a result of unskillful finance, and so the community is deprived of what is a basically efficient enterprise (in the sense of offering its service or "utility" at a low cost) because of weakness in that complementary department. Every form of organization existing in a highly developed money economy must keep the financial administrative function in mind if it hopes to continue functioning. A nonprofit association engaged in bringing fine music to a community might

feel itself above such a mundane commercial thought, but if it fails to conserve its cash resources satisfactorily or to please those special contributors who are willing to pay its deficits, it is likely to find its existence short.

One of the difficulties most often experienced in connection with financial administration in business is that which grows out of the lack of financial planning. Take, for example, the case of the plumbing contractor who undertook to provide the plumbing for 150 new residences in a development on the outskirts of a major city. Under a provision of the contract for the over-all financing of the settlement, no individual contractor would be repaid until the buildings had been completed and satisfied the requirements of the Federal Housing Authority. This plumber had committed himself to an undertaking that offered substantial profit opportunities, but the cash requirements were beyond his available resources. He was skilled in the plumbing trade but lacked that all-important financial skill of planning receipts and disbursements to an even elementary extent. By the time he had completed most of the job, he had tapped all available financing methods, even to the extent of having mortgaged his home. His employees also donated their services for a period of three weeks without pay, but in the end he still had to be taken over by the courts because of inability to meet maturing obligations incurred in fulfilling his side of the contract.

He had failed to see that his resources would not permit his customary easygoing credit policy for such a large job. Either he should have stipulated payment for at least a major part of each installation within a short time after its completion and been assured his contractor had the means to make good; or he should have arranged for bank loans, and his bank would have insisted upon suitable financial safeguards to ensure ultimate payment.

Another example of the dangers of inadequate financial planning is seen in the case of a small haberdasher who, having realized substantial profits over a short period of operation, decided to expand his business substantially. This expansion involved considerable investment in elaborate fixtures, which, in order to earn a reasonable return, would have required a further substantial increase in sales. Since the location made any such sales volume very unlikely, the financial strength of the business declined markedly. His worst mistake was contracting for amounts on short term which the business could not hope to pay for except over a period of years. Even if he had arranged for installment payments, the burden would have been so great as to threaten solvency (*i.e.*,

ability to pay bills when due) if any decline in sales or earnings should occur. A common error of business management in every period of good times is to undertake "improvements" which may add but little to profits and impose financial burdens that any general business reaction may make fatal.

Another phase of financial administration in which many fail and others succeed because of differences in their training and background is that of financing. Success here depends, among other things, upon knowledge of the various institutions which offer funds for business purposes and how to approach them. A case in point is that of a young inventor and promoter who, after developing a new product up to the stage at which the manufacturing difficulties had been ironed out and sales were growing rapidly, sold his entire ownership interest in order to secure enough ready cash to apply to the development of a new product. Only a day or two after the sale of the business he discovered that he could have borrowed the money from a bank and thereby preserved his interest in both endeavors. The buyer of the business possessed no great amount of liquid resources of his own but had access to credit and was more skilled in selling a proposal to financial institutions, such as the banks, because of his knowledge of their requirements and operating methods.

This same buyer, subsequently, was faced with financial problems of his own, namely, whether or not to expand output and if so how best to finance it—by a long-term credit instrument, a senior equity instrument with participating features, or a straight common-stock type of instrument. The banks refused to grant any further credit on an unsecured basis and were uninterested in a loan secured by the finished inventory because of its novelty nature. This individual's ability to secure help from some financial institutions did not assure him of success in meeting all the problems of financial administration. Though he finally settled on medium-term unsecured notes with common stock attached as a means of providing rapid return of principal without sacrifice of the right to participate in subsequent profit and growth, he would have done better to avoid the dangers of a credit instrument, with its associated contractural maturity, and substitute instead a senior equity instrument, such as a preferred stock, with a definite retirement provision attached.

Special Attributes of the Financial Function in Business

The financial function in general has already been described as the planning for, raising, controlling, and disposing of the cash resources

of a particular unit to the end of furthering its ultimate objective and maintaining the most satisfactory relations possible between its resources and the claims against these resources. In essence we can say that financial management involves the application of general management principles to the particular financial operation. One important difference between the finances of a business and of a tax-supported governmental body or a charity-supported philanthropy, however, is that once established the first sets up a circular cash flow from its own operations that can make it self-supporting, where the latter two must depend upon continuous outside contributions, that is, tax revenues and gifts. Another difference is the hope that the operations of the business will generate an excess of cash in the form of profits.

Two basic financial principles flow from the profit-seeking motive. First, the investment of cash in earning assets should be so directed and controlled as to generate the maximum amount of business or gross revenue. This is the principle of maximizing the utilization of the dollars invested. Second, the amount of net profit obtained on each dollar of revenue should be maximized. Such profit creation depends upon efficient control over expenses incurred in generating the gross revenue. Maximum volume of revenues with a maximum margin of profit and a minimum investment in assets spells maximum earning power.

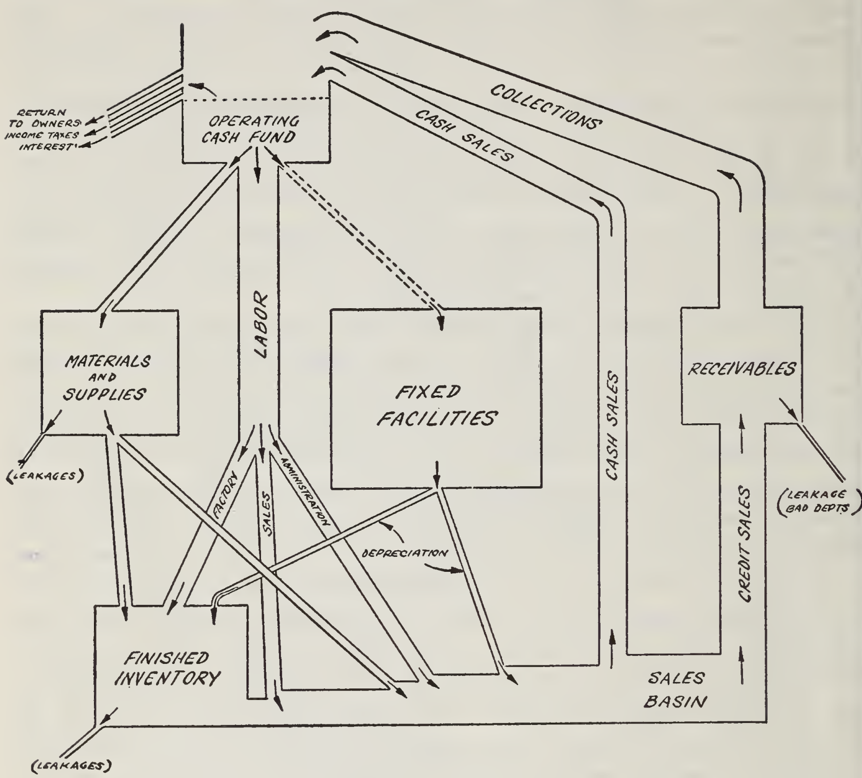
This business process by which a net profit is realized out of the application of funds to earning assets which are gradually reconverted back into cash through the operations of the business is referred to as the cash flow of business. It is the vital organic functioning of the business process. The two basic aspects of the flow are, first, the internal circulatory process, which might be described as the circuit flow of funds, and, second, the acquisition or disposition of funds which can be used to expand or contract the circuit flow.

There is a third current of funds brought on by most business operations which should be recognized, although it is directly associated with the circuit flow: the shifting of funds among different categories of assets. This shifting may be accomplished intermittently, as with the sale of fixed assets the proceeds from which are invested in inventories; or it may come about regularly, as through the allowance for depreciation.

Exhibit I below portrays in a mechanical fashion the essential aspects of the circuit flow. The external phase of the cash flow could be illustrated by showing main inlets to and outlets from the operating cash fund receptacle which could cause an expansion or contraction in the size of the circuit flow by increasing or decreasing the amount of funds employed.

Exhibit I

Circuit Flow of Funds in Business



Management Responsibilities Imposed by the Financial Function

Successful administration of the over-all business financial function requires careful attention to many specific duties. It matters not to what individual in the organizational structure the responsibility for them is assigned. In large enterprises most of them will be charged to the specialized officers, such as the treasurer, the comptroller, and their staff. In small, single proprietorships, on the other hand, they are quite generally assumed as the job of the owner, assisted perhaps by a bookkeeper or secretary. There are basic problems of financial management in every business regardless of whether or not there is specialized personnel to handle them. This is to say that a single proprietor must be familiar with the basic principles and methods of financial management just as much as a treasurer or financial vice-president of a large corporation.

As was mentioned earlier, the initial financial task of a new or a going business is that of planning how much the money needs are in order to carry on the proposed operations. Sometimes a promoter will not invest any funds until *all* the total amount needed has been raised. But it is desirable, if possible, to have on hand, or have commitments made for, all the needed funds before launching on a new step. Too many funds will contribute to waste and inefficient utilization. Too few funds will shackle the business and frustrate realization of ultimate goals and may even spell the early death knell for the business.

The second responsibility has been indicated as that of raising the necessary funds to meet the operating requirements. Underlying this major responsibility, in turn, are numerous practical considerations which inevitably vary with the particular circumstances involved. For example, the nature of the operating requirements may be different, depending upon whether they arise from an initial undertaking, a seasonal change, or a permanent form of expansion. Alternative sources of funds must be recognized and studied to the end of assuring at least the minimum cash requirements under the most advantageous terms. Should the money be sought from the owners or from creditors? If the latter, should it be short-term or long-term? What types of funds are actually available—what are the customary requirements imposed by the various sources? It is one thing to have a desirable plan, but it is still another to have your plan conform with the realities of the situation. To the extent that alternative sources are available, however, there are the objectives to be considered of preserving the control of the existing owners, holding down cost, and preserving flexibility for any later financing.

The third major responsibility is that of controlling the use of funds committed to the operation of the concern. This objective also involves various considerations and specialized activities. The amount of funds actually invested in the operating assets must be carefully supervised so as to maximize their efficient utilization. A close stewardship over the existing cash must also be maintained to avoid its unnecessary dissipation. The chief hazard is that of incurring unwise expenses because of inadequate planning or a departure from plan. There are also the dangers of theft and embezzlement, which are increased by unwise handling.

Finally there is the need for determining the disposition of the funds represented by the net income. Shall they serve as a source of funds for expansion purposes or for retiring outstanding debt, or should they be distributed to the owners either as income or as a return of principal? All these matters will be studied as our discussion proceeds.

In addition to the regularly recurring financial responsibilities and activities associated with the operation of a going concern, there are some events in a business's life which involve financial skills and understanding but which occur only once or infrequently. Promotion of a new venture, which is a special case of financial planning, is one such situation. Also, a financial readjustment of the relations of creditors and owners may be necessary if the affairs of the business become involved because of temporary inability to meet obligations or because of actual insolvency. Since a business, like a horse, is usually worth more alive than dead, every effort is made to restore a sick business to financial health. If continued operations give promise of continued dissipation of the business's resources, however, liquidation will logically follow. This problem may be a relatively simple matter of marshaling the claims of creditors and owners and paying them off in the order of their priorities. Among large corporations, however, complex financial problems may arise in the work of liquidation. Finally, the problems of valuation and financing involved in the sale or exchange of business properties have special significance to the financial specialist. Like the other two special situations above, the whole problem of bringing about a change of ownership of businesses represents a point of synthesis whereon all the essential knowledge and techniques of finance come to bear.

The initial topic to be considered in the following chapters is that of risk and risk bearing. The function of risk bearing is, indeed, a general economic one that cuts across all areas of business management, not merely finance. Its general treatment is peculiarly financial in character, however, and therefore usually rests with the financial management of businesses. Certainly the various legal devices for sharing and distributing risk, the insurance means of shifting risk, and the analytical technique for anticipating and measuring risk are clearly the province of finance. And a student being introduced to the field would flounder in his attempt to understand fully the various administrative phases if he lacked an adequate appreciation of these basic financial-economic concepts.

This introductory material will investigate the fundamental principles underlying the organization of the financial structure of a business and the basic characteristics of the creditor and ownership relationships that arise in financing operating requirements. The material provides background to both financing objectives and financing devices. The form of business organization as a device for achieving definite financial objectives related to the interrelated problems of distributing risk, raising funds, and protecting income and control is also discussed.

Factors Influencing the Administration of the Financial Function

Although these financial responsibilities apply to all situations and under all circumstances, their individual treatment varies somewhat according to the particular characteristics of the business and the times. The principal factors which bear upon specific financial administration in this sense are (1) the type of business, (2) the size of business, (3) the form of legal organization under which the business is being operated, and (4) the stage of the business cycle. Other less generally applicable factors may have bearing upon the financial operations from time to time, such as management temperament, the existence of favorable contacts, management training and skill, and the like; but their influence is subject to many different associated conditions, and extended discussion of their potential significance would not be in keeping with our purpose here.

The type of business is probably the most important single factor governing individual financial policy. By type of business is meant the nature of operations as expressed by asset requirements. Some businesses, particularly personal service, have need for only a very small investment in property. Initial planning to safeguard principal investment is therefore of less importance than in the case of a merchandising or manufacturing business which relies mainly upon the use and sale of particular items of property. Also, some businesses, such as merchandising, have major need for current assets as opposed to fixed, whereas the opposite holds true for public utilities and some manufacturing undertakings. This difference has a pronounced bearing upon the variations that exist among businesses with respect to financial planning, financial control, and financing. Table 1 is helpful in illustrating this fact. Note the differences that exist among the three categories of Manufacturing, Retail trade, and Utilities as to composition of assets, methods of financing, and rapidity of turnover of the assets.

More thorough attention will be given to the influence of the type of business on financial management throughout the subsequent text material. An awareness of the point from the very start, however, is to be desired.

The size of business exerts its influence on financial management, particularly in the areas of control and financing. The larger the business, the more complicated becomes the problem of control and the more dependent is management upon routine forms, organization, and system in accomplishing the desired end. The management tools of accounting and budgeting assume particular importance with the large-scale, more impersonal enterprises.

On the other hand, a large business tends to have an advantage when it comes to raising new funds either for permanent expansion or to pro-

Table 1

Condensed Composite Balance Sheet and Sales Figure for 300 Large Corporations in Selected Industries, 1950

(Dollar figures in millions)

Item	Manufacturing	Retail trade	Utilities
Number of companies	202	42	56
Total assets	$54,663	$4,738	$38,641
Current	29,813	3,338	4,501
Fixed	24,850	1,400	34,140
Total liabilities	$17,922	$1,515	$18,571
Current	12,694	1,293	3,170
Fixed	5,228	222	15,401
Net worth	$36,741	$3,223	$20,070
Total sales	$70,538	$11,924	$12,834
Ratio of sales to total assets	1.29–1	2.52–1	0.33–1
Ratio of current assets to total assets	0.55	0.70	0.12
Ratio of fixed assets to total assets	0.45	0.30	0.88
Ratio of current assets to current liabilities	2.35–1	2.58–1	1.42–1
Ratio of current liabilities to total liabilities	0.71	0.85	0.17
Ratio of net worth to total assets	0.67	0.68	0.52

Source: Adapted from *Federal Reserve Bulletin*, August, 1951, pp. 918 and 919.

vide relief over temporary emergency periods. There is a certain financial integrity which accompanies a large business. And there is definitely a financial stability or security associated with such a business which may be only a carry-over from the momentum built up over time. Though it may be attacked on rational grounds, the fact remains that a large business with a comparatively weak financial position will oftentimes find it easier to raise funds than a small business with a basically stronger financial position.

The form of legal organization as a factor bearing upon financial management is in one sense different from the others mentioned. Whereas these others are more or less conditions to which management must adjust, the form of organization is in itself the result of a managerial

decision. This decision is based upon recognition of the fact that the form of organization has certain financial attributes and that over-all successful financial management is therefore contingent upon proper choice. The limited liability of the corporation, for one thing, has decided bearing upon credit standing and availability of funds. The taxation of business income acquired under the corporate form, for another, calls for specific recognition of the fact when the formation of a business undertaking is planned. One of the most important considerations, however, is that of size. The corporate form is peculiarly suited to the financing of large-scale enterprise, whereas the other forms are adequate for small business needs and yet avoid the added costs attached to the corporations.

The stage of the business cycle probably influences financial policy much less than it should. The explanation for this, of course, is that the stage is not clearly discernible until it is past. Ideally, conservatism should rule in making financial decisions during periods of inflation, and optimism should prevail during periods of deflation, but this would require action contrary to popular sentiment at the time. All too often businesses—particularly those which are young in experience—are caught in a current of inflationary optimism and overexpand, only to be crushed a short while later on the rocks of deflation.

If, in fact, it were possible to judge the conditions of the time as inflationary or deflationary and appropriate action were taken by all accordingly, it is reasonable to say that there would be little or no business cycle with which to deal. The very fact that there are fluctuating business conditions is, in a sense, proof in itself that either the stage is for most indeterminable or that, if determinable, businessmen lack the courage of their convictions in making business decisions. All this, however, is by way of giving reason for certain action—it does not provide an excuse. It is of the utmost importance that every individual faced with financial problems of any sort try to judge the state of general business conditions so that his own decisions and actions can conform to the principle of compensatory action.

Tools of Financial Administration

Successful execution of the many financial duties depends substantially upon the use of two principal tools. One is the organized system of accounting, which provides the financial administrator with a record of past operating results and the current financial condition. Only by accurate understanding and interpretation of these financial records can the current situation be appraised and future operating policies be reasonably determined. The other tool is budgeting, which is a matter of financial planning to the end of better controlling the acquisition and use of funds.

Intelligent analysis of accounting records furthers control by providing a basis for understanding past performance and present condition. The budgetary tool, on the other hand, provides for current control by anticipating financial needs and establishing standards of operating performance. To some extent these budgeted standards are based upon past experience, and so at this point the two tools are closely interrelated.

This brief mention of the important administrative tools of finance effectively completes coverage of the whole of the subject of business finance as it is to be developed in the remainder of this book. Essentially the material can be summarized as follows: The major functions involved in managing the finances of a business are (1) planning for needs, (2) financing the needs, and (3) controlling the resources on hand, including determining their proper disposition. In addition, there are certain problems essentially financial in character which are likely to occur in connection with the operation of a business but are not of a regularly recurring sort. They are promotion, failure or financial strain, and sale or exchange of business properties. Successful administration of any of these responsibilities—the regular functions or the isolated problems—requires thorough facility with the above-mentioned tools and familiarity with the instruments and forms of financial organization. Some slight variation in particular administrative practice, however, may be accounted for by such things as differences in the type of business, the size of business, the form of business organization, and the stage of the business cycle. We shall first proceed to cover this material by developing basic understanding as to the financial organization of business enterprise and the interpretation and use of financial data.

Questions

1. What is the particular meaning to be conveyed by the term finance?
2. What are the essential functions or activities involved in managing the monetary affairs of any organization?
3. What are some other administrative functions in business besides that of finance?
4. In what way is the cash-flow concept related to the financial function in business?
5. What are the two broad objectives of business management to which financial management must contribute directly?
6. What are the two basic administrative tools relied upon for achieving these objectives? In what ways do they serve as tools?

7. How do the following factors influence the administration of the financial function?
   a. Type of business
   b. Size of business
   c. Form of legal organization
   d. Stage of the business cycle

Chapter 2. ORGANIZATION OF BUSINESS TO SHARE RISK, INCOME, AND CONTROL

This chapter will describe the relationships found in the different forms of business organization by which people cooperate to finance business. Hastings Lyon, an early writer in the field of finance, suggested that the arrangements for bringing money to business might be analyzed for the basic elements, risk, income, and control.[1] Organizers of new businesses and managers of existing businesses today have a variety of legal devices or economic relationships, evolved over a long period of time, from which to choose in arranging for the financing of their particular concerns. The financial arrangement chosen in any case will depend on the objectives of management and the desires of the individuals or institutions that supply the funds. In many cases, of course, managements and the suppliers of funds are the same, and so to that extent their aims are the same.

The factors that affect the particular means of raising funds for the business are many. Some—form of organization, type of business, size, business conditions—were mentioned in the preceding chapter. Here only one, the legal form of business organization, is examined to see how the choice of organization influences the number and variety of ways that management may use to apportion the elements of risk, income, and control. The three forms of organization, proprietorship, partnership, and corporation, which have been found most useful in meeting business needs are considered.[2] Before analyzing the apportionment of the elements of risk, income, and control between the various types of investors and others supplying funds to business it is important to appreciate the nature of financial risk, in many respects the most important of the three.

[1] Hastings Lyon, *Corporation Finance* (Boston, Houghton Mifflin Company, 1912), p. 4.

[2] Brief discussions of the nature of other forms of organization—joint stock company, joint venture, business trust, mining partnership, and partnership association—may be found in H. G. Guthmann and H. E. Dougall, *Corporate Financial Policy,* 2d ed. (New York, Prentice-Hall, Inc., 1948), and H. V. Cherrington, *Business Organization and Finance* (New York, The Ronald Press Company, 1948).

The Meaning of Financial Risk

The word "risk" suggests the exposure of something to loss or injury. The term "financial risk," in turn, refers to the potential incurrence of loss of money or its equivalent. More specifically in terms of a business enterprise it relates to the possible loss of money invested in some business undertaking or financial institution—that is, loss of principal. This financial risk is, of course, only one segment of the over-all business risk. Particularly is this true in a highly specialized economy such as our own. There is, for example, the employment risk borne by the employee, the consumption risk borne by the dependent consumer, and the over-all economic risk borne by society as a whole. However, there is a fundamental difference between the position of the bearer of financial risk and all these others which is of the utmost importance. The consumer, employee, and society are not entirely dependent upon the welfare of the particular business unit, but the investor is. Should a given business fail, the regular customers can generally adopt substitutes, turn to competitive outlets, or wait for the product or service to be made available by others. The employee, similarly, can seek employment of a different kind or of the same kind with a different business. The same recourse in general holds for society at large. The loss of these groups, though real, is nonetheless temporary, transitory, incomplete. The loss to the investor, on the other hand, is final.

Since this financial risk is derived from the over-all risk associated with the particular business unit, in order to understand its basis it is necessary to go back to the uncertainties which make for the general business risk. There are three major types, the economic uncertainties, the natural uncertainties (acts of God, uncertainties of nature), and the human uncertainties (man-made disruptions). Economic uncertainties would be represented by such phenomena as changes in consumer attitudes and preferences, fluctuations in economic conditions, price changes, technological changes, competitive changes, and strikes. Natural uncertainties would consist of fire produced by lightning and other such natural causes, windstorm damage, death or injury of strategic employees, floods, etc. And human uncertainties would include such things as riots, war, theft, vandalism, etc.

The business uncertainties which arise from natural or human causes may be minimized in their incidence upon a particular business. The businessman wants and should seek to avoid these dangers as far as possible. Since they are not a necessary part of the economic activity being performed but rather occur sporadically and indiscriminately,

complete assumption of the risks adds nothing to the satisfactory completion of the task but does jeopardize its achievement substantially. By spreading the losses realized from such uncertainties over a large group of individuals affected, the cost can be held to a relatively small known amount. The loss can be borne by all, that is to say, rather than concentrated on a few. This, then, is the fundamental purpose of insurance. When a businessman buys the proper type of insurance, he may be said to be shifting the incidence of the risk produced by these uncertainties to the group and at the same time agreeing to bear his own prorata cost. The ultimate risk cannot be avoided, in other words, but its consequences can be minimized to a single individual.

On the other hand, the economic uncertainties are not independent of the particular business unit. They are peculiar to each and every separate endeavor. They cannot, therefore, be shared. There are some possible exceptions to this, as with credit insurance, but in essence the point holds true. As a matter of fact, it is the assumption of the risk growing out of these economic uncertainties that constitutes the social function of the private business investor. The particular risks cannot be avoided; they cannot be shared; they must be assumed by someone who is both willing and able to do so. If they are not so assumed, one or two alternatives must follow: the product or service must go wanting, or the community as a whole must produce the goods on a cooperative basis.

In this connection, it is erroneous to think that the economic risk is avoided when society assumes responsibility for the production. The risk is in any case inescapable because the contributing uncertainties are beyond the control of man—assuming, of course, a preservation of free consumer choice and individual action. A society can standardize production, force individual conformance, and eliminate the effects of change; but this constitutes a case of putting the cart before the horse: risk is avoided, but so is the fullest satisfaction of individual wants. It is the same as saying that the uncertainties arising from the decisions and interplay of free individuals are eliminated by refusing to allow such individual freedom. Under these circumstances the worth of the product made available by such a "riskless economy" becomes very questionable indeed.

If we accept the premise of the complementarity between individual freedom of choice and the highest possible satisfaction of human wants, then it follows that economic risk is unavoidable in the quest for high output because uncertainty becomes inevitable. It is reasonable to assert, further, that this risk will be most satisfactorily borne by an individual who is trained and temperamentally suited for the task and alerted to

highest effort by being the principal loser in case of failure. If a community as a whole assumes the risk, ultimate responsibility for success or failure is bound still to rest on an individual or small group of individuals, and since their fortune and welfare are not so inextricably linked to the endeavor, there is danger of greater latitude on their part in serving the wishes of the consumer than would be true with a private investor subject to the economic pressure of competition, substitution, and technological change and intensely conscious of his private loss if he does not act promptly to meet these changed conditions.

It is in this connection that we speak of "profit" as being the reward for assuming risk. It is the means by which the private investor is compensated for his social service of voluntarily accepting the financial risk involved in providing an economic good. The term might be avoided by society's taking over all the means of production, but the substance would remain. So long as the desires of the consuming public are held to be the most important determinant of production, an equivalent of the profit residuum will have to be relied upon as the only effective guide to the allocation of productive resources.

It is sometimes stated erroneously that profit is the reward for risk "bearing." The inaccurate choice of words represented by this statement can be illustrated by assuming a simple case. Suppose a business is able to earn consistently an annual return of 100 per cent on its total investment. The risk associated with its operation would ordinarily appear very low, for the full principal has been recovered out of profit in one year's time. Although risk is based upon the future uncertainties rather than past or present conditions, recent experience is in most cases the best possible guide to future expectations. For this reason, the risk connected with a going business may be said to be generally inverse to its average rate of return, all other things being equal. In the above case, for example, the risk is low because the high return in the past is evidence of a strong economic position which reduces the element of economic uncertainty in the future. If the business were to be sold, it would undoubtedly bring a price well above its original cost and the new owner would, accordingly, receive a rate of return well below the past 100 per cent. The profit, or return, therefore, is compensation not for *bearing* risk but for *assuming* it at one time in the past. It is in essence the reward to an investor for having advanced funds in the face of economic uncertainties and having made goods available to others at a potential sacrifice to himself. High profits are not the reward for carrying great risks; the hope for such profits merely provides the inducement for the assumption of such risks at one time. And if the

hope materializes, the realized profits become the reward for that past action.

Since the investor performs a special social function only in connection with the assumption of the economic risk, it behooves the management of every business to distinguish clearly between the insurable and noninsurable hazards to its particular business operation and provide for adequate insurance coverage when it is reasonably priced. Beyond that it must endeavor in every way possible to protect the principal invested against the economic, or noninsurable, hazards. In general, principal might be recovered, and thereby protected, in three different ways, (1) through sale of one's interest in a business, (2) by being repaid at a given date in keeping with contractual provisions, and (3) by being repaid before a specific maturity date out of the proceeds secured from liquidation of the assets when the enterprise is terminated. Conditions which vary the likelihood of recovery by any of these means have a direct bearing upon the degree of financial risk. For example, we shall discover in subsequent discussion that a partnership interest is likely to be more difficult to sell than the stock of a corporation, not because of inferiority in economic strength, but rather because of a much more restricted market for that type of investment.

Attention should be directed to the use of the term degree of risk in the above paragraph. In speaking of financial risk it is necessary to differentiate between the "amount at risk" and the "degree of risk." Another way of stating it is to say that a distinction must be drawn between the probability of an event occurring (risk of loss) and the consequences to be suffered if such an event occurs (amount of potential loss). One cannot compare the "general risk" involved in two widely different situations, but it is both possible and useful to differentiate between the amount at risk or the degree of risk. For example, is there greater risk attached to a 1-million-dollar investment in American Telephone and Telegraph Company common stock or to a $10,000 investment in a local chain of beauty parlors? The amount at risk in the first case is 100 times as large, but the degree of risk associated with the latter is much greater. For the purpose of our present discussion we must limit our consideration to the matter of degree rather than risk in general.

For an investment to be protected by the first of the above three means, it must meet the tests of *marketability,* which means it must be readily salable without significant variation in price. This requirement in turn demands that the business be sound economically, the investment agreement sound legally, and the market sufficiently broad to provide a continual flow of bids and offers. The second avenue, that the principal

be prepaid at maturity, requires, in turn, a sound business operation and an original contractual position that provides such a definite repayment arrangement. Finally, the third means of principal recovery—repayment out of liquidation proceeds—relies mainly upon preferential contractual position. In summary, then, it may be said that in furthering the end of principal protection three primary considerations prevail, (1) the economic strength of the business, (2) the contractual position obtained, and (3) the breadth of the market support. So far as points 1 and 3 are concerned, it is within the power of management to influence them somewhat by sound business practice. In the main, however, they are governed by the general economic uncertainties discussed above and constitute the great unknown in the commitment of funds. On the other hand, the factor of contractual position is wholly within the province of management to establish and may thereby be used to distribute the over-all financial risk in a way most beneficial to the ultimate objective of the business and its several investor groups.

On the basis of these general introductory remarks three major points should be clear. First, the financial risk in business is attributable to two basic types of uncertainty, those which have their origin in more or less natural causes and are not necessarily related to the business operation and those which arise out of the particular economic functioning of a business and cannot be separated therefrom. Second, the business risks associated with the first type of uncertainty can and should be minimized through the institution of insurance. Third, although the basic economic risks can in no way be shifted or avoided (noninsurable), they can be shared and distributed among the various investors by means of contractual arrangements so that the separate ends of the different financial interests can be most appropriately served.

Sources of Business Funds

Before analyzing the financial arrangements made with those who furnish the means for carrying on business, the general classes of such suppliers may be reviewed briefly. They fall into two categories: creditors and owners. Information as to the amount supplied by these contributors is found in the balance sheet. On the left-hand side of this financial statement are listed the assets, that is, the way in which the funds are employed, as in plant or inventories. On the right-hand side are reported the various classes of creditors and owners and the amounts of funds they have supplied. Assets represent the use of funds; the liability side, the sources of funds.

Creditors, as the name implies, have extended credit to the business in the form either of money or of goods or property, or both. They expect ultimately to be paid back the sum they have advanced to the business. Theirs is a temporary investment of funds, even though the period is sometimes a long one. Long-term loans often run 25 to 50 years in the public-utility and railroad fields.

Owners, on the other hand, are those individuals who have made a permanent investment of funds in the business. They rarely expect to have their investment returned to them on a prearranged basis unless the purpose for which the business is organized is of a temporary nature and is to be liquidated as soon as its aim is achieved.[3] The only way the owner can ordinarily obtain the return of his investment is to sell the business or sell the instrument evidencing his ownership interest in the business. Even then, there is no assurance that he will receive the same number of dollars he originally invested.

Creditors

Evidence of the use of creditor funds in the business is found by the appearance of one or more of the following titles on the right-hand side of the balance sheet:

1. *Accounts Payable.* These represent the extension of what is commonly called "trade credit," the sale of goods or services to the business by the creditor on open book account. No credit instrument is used in this type of credit transaction. The goods are shipped and at the same time a bill or invoice is mailed to the purchaser by the seller. The invoice is merely a notice of the amount due and the credit terms. The credit terms include the period within which the invoice is to be paid and any discounts allowed for earlier payment.

2. *Notes Payable.* These represent the loan of funds to the business by a commercial bank, finance company, officer, employee, or stockholder, etc., and occasionally the sale of goods to the firm. As the name implies, the supplying of funds in this manner is represented by a credit instrument, a promissory note signed by one or more of the owners or an authorized agent of the owners.

3. *Accruals.* These represent not a definite extension of credit like the preceding but an accumulation of indebtedness up to the date of the balance sheet for items which will not be billed or come due till a future date. They commonly include accumulating wages for em-

[3] In the case of corporations with preferred stock having a mandatory sinking fund, the stockholder is not certain when he will be paid off because the sinking fund will often depend upon the earnings of the company, which will fluctuate with economic conditions, or even if fixed in amount, shares to be retired are called by lot.

ployees and taxes that will be owing to the Federal or local governments. To the extent that a business has used the services of its employees, but not yet paid them, it has, in effect, the use of funds it would not have had if the employees were paid each day upon the rendering of their service. The same is true of accrued state and local taxes. Public organizations are providing services of one kind or another for the business every day, and to the extent that taxes are paid only once or twice a year, the business has the use of the funds of the local governments. The Federal income tax accrual is in a somewhat different position. It is present only in the corporate form of business organization and then only if the operations of the business provide a return over and above all expenses. The earnings of the enterprise may vary from month to month or quarter to quarter with the result that the liability of the business for the Federal income tax will vary with the balance of net income earned for the owners of the corporation. In effect, the government allows the corporation to use or keep the share of business profits which is taken as income tax in the business from the time it is earned until the tax becomes due and payable.

4. *Mortgage.* The appearance of the item "mortgage" on the right-hand side of the balance sheet indicates that the firm has received funds from a creditor usually for a long period of time.[4] It also indicates that the creditor supplying the funds has required the business to put up some security, land, buildings, or equipment as security for the loan. Borrowing on a mortgage is generally the only way that a proprietorship or partnership can secure long-term creditor funds. Small corporations, for the most part, find themselves in the same situation.

5. *Bonds.* When a long-term debt is so large that it is divided up among a number of creditors, as when a corporation is borrowing a large sum from the public, it is called a "bond issue." Each creditor holds a bond, or promise to pay, for his share of the debt. There are many different types of bonds issued by corporations, differing in terms of security, maturity, methods of payment of principal and interest, and means of transfer, which are beyond the scope of the discussion at this point. Bonds, which are typically issued in units of $1,000 maturity value, are merely a device for breaking up a large sum into small pieces and thus making it possible to tap a large number of creditors. The primary difference between a mortgage and a mortgage bond is that the former is given to an individual creditor; in the latter,

[4] A mortgage consists of two documents, a promissory note specifying the terms of payment and interest, and a second instrument pledging title to the property to creditors so that the latter will have a prior claim upon such property if payments are not made in accordance with the terms of the note.

the mortgage (pledge of property) is made out to a third party, a trustee, for the benefit or security of a group of creditors, known as "bondholders," each of whom receives an individual promise to pay, which is called a bond.

Owners

Although the position of owners may vary among the different forms of business organization, and within the same organization, they are in essentially the same position as far as the permanence of their investment and the subordinate position of that investment to the claims of creditors are concerned. They supply the permanent funds and the creditors supply funds for periods of varying duration.

1. *Proprietorship.* The owner's interest in a proprietorship usually appears as the single account, "John Doe, Capital," in the balance sheet. It will consist of sums invested by the owner, which have been increased by profits and decreased by losses and withdrawals.

2. *Partnership.* In the partnership the owners' interests are treated similarly to that of the proprietorship except that they are divided among the separate accounts of the two or more partners. The partners are sometimes divided into two classes, general and limited, and are so designated. The difference in the financial position of the two classes of partners is treated in a subsequent section of this chapter.

3. *Corporation.* The funds supplied by the owners of a corporation are characteristically represented by two accounts, common stock and surplus. Sometimes these funds are contributed by more than one class of owners, in which case preferred stock or a special class of common stock will be present. The differences in the financial position of the various classes of owners that may be present in a corporation are treated below in the section on special types of owners. The significance of that part of the ownership interest called "surplus" is discussed in a later chapter.

Financial Characteristics of the Creditor Position

Risk

Creditors in advancing funds to a business characteristically enjoy an advantage over the owners on three scores as far as the risk of loss of their investment is concerned.

1. They have *a prior claim on the assets* of the enterprise *in case of liquidation.* As long as an enterprise is a going concern and has some prospect of profitable operation, the values placed on the assets in the balance sheet, assuming conservative accounting practices, may approxi-

mate the actual worth of these assets to any other individual or enterprise who could use them for the same purpose. However, if a firm fails or has to be liquidated for any other reason, many of the assets may find a market only at greatly reduced prices. Even new machines have only secondhand value. Inventory must be sold as broken lots or sometimes even as scrap. Even receivables are sometimes harder to collect by a liquidating than by a going concern. Where this is the case, the balance-sheet values just prior to liquidation may be much higher than what can be realized in cash to pay off creditors and owners who have invested funds in the enterprise. To the extent that there is a loss in liquidation, it must be borne in full by the owners. The creditors suffer only if the loss is large enough to wipe out the entire owner contribution.

The special point of owners' personal liability for business debts as it affects the risk of creditors should be considered here. In a corporation, the creditors will suffer whenever losses wipe out more than the stockholders' investment in the business. Corporation creditors have no claim against the personal assets of stockholder owners if the latter have observed all the legal requirements. In a sole proprietorship, however, no legal distinction is made between business assets and personal assets in settling the claims of business creditors. As long as the total assets of the proprietor exceed his total debts, the business creditors will be paid in full. If total debts to creditors, both business and nonbusiness, exceed total assets, then all creditors will be treated alike in liquidation of the assets unless some of them have preferred or secured claims, in which case these latter will have some priority in liquidation as described below.

In a partnership creditors have less risk than in a corporation of the same size to the extent that additional protection is afforded by the partners' personal assets. Such personal assets do not appear in the balance sheet of the business and so must be learned through supplementing information. All the property of each partner is subject to unlimited liability for any partnership debts. A business creditor if he so chooses may collect his debt directly from a partner's personal assets, even though the partnership has adequate assets to meet the claim, subject only to the rules of marshaling of the assets. The two basic rules provide that in any question of precedence between business creditors and personal creditors (*a*) the business creditors shall have first claim on the business assets and (*b*) personal creditors shall have first claim on personal assets. The excess of the personal assets over personal debts of each of the partners measures the *additional* margin of protection to partnership creditors as compared with those of a cor-

poration. The remaining rules for marshaling partnership creditors' claims may be summarized as follows: (*c*) Business creditors will have a claim against any excess of personal assets over personal debts; (*d*) personal creditors will have a claim against the particular debtor partner's remaining interest in the business, if any, after all business creditors have been fully satisfied; (*e*) personal creditors will have no claim against the personal assets of another partner.

The application of these rules for the settling of claims against the partnership and individual partners may be made clearer by an illustration. Three general partners A, B, and C have a business with total assets of $150,000 and debts of $50,000 before failure. The firm was unable to meet some of its debts when they came due and as a result was forced to liquidate. The assets realized only $30,000 in liquidation, leaving a loss of $120,000. The partnership agreement provided that profits and losses were to be shared equally. (This division would also have been followed if no mention were made of a profit and loss sharing ratio in the partnership agreement or if no agreement existed.)

Shown below are the partnership accounts of the partners just prior to failure, the apportionment of the loss, and the final equities in the accounts. Also listed are the personal assets and debts of each partner. Under the marshaling rule the business creditors would receive all the $30,000 realized from the sale of the business assets and would still have a claim for $20,000 against any personal assets available after payment of personal creditors.

Partner	Partners' equities prior to failure (1)	Liquidation loss (2)	Partners' final business equities (3)	Personal assets (4)	Personal debts (5)
A	$50,000	$40,000	$10,000	$12,000	$12,000
B	40,000	40,000	0	30,000	5,000
C	10,000	40,000	−30,000	5,000	10,000

Partner A's personal assets (column 4) are just enough to cover his personal debts (column 5). Partner B can pay off his personal creditors and will have a balance of $25,000 of personal assets. Partner C's personal assets are insufficient to meet the claims of his personal creditors. Since B is the only partner having a balance of net personal assets, the business creditors will collect the entire $20,000 due them from B. If

this concern had been a corporation, the business creditors would have lost the $20,000.

The third column in the table above (Partners' final business equities) shows that C has a deficiency of $30,000 in his capital account and so he rather than B should have met the $20,000 deficiency in partnership assets to pay creditors. Had his personal assets permitted such a contribution, it would have reduced the minus balance in his account from $30,000 to $10,000. The remaining minus balance of $10,000 would have represented the balance he would have owed to A to permit that fellow partner to withdraw his capital balance of that amount. As it turned out, the $20,000 contributed by B from his personal assets would give him a credit balance in his partnership account and so the business would end with C owing $10,000 and $20,000 to A and B, respectively. Should C later acquire more personal assets, any surplus after paying his personal creditors would be subject to his partners' claims.

More elaborate complexities may be imagined as the result of special arrangements among the partners themselves, as in the case of loan accounts, limited partnership agreements, etc., but such analysis would carry us into the fields of business law and accounting. The purpose of our illustration has been to bring home the possible seriousness of the special risk borne by owners in a partnership when they have personal assets.

Even among the creditors there may be a ranking of claims in order of priority of payment in dissolution. The order of payment among the three principal classes of claimants is shown below, and under each are listed examples of the type of claims that would fall in each category.[5]

1. Preferred
   a. Taxes
   b. Wages
2. Secured
   a. Mortgage
   b. Bank loan secured by Accounts Receivable
3. Unsecured
   a. Trade credit
   b. Unsecured promissory note
   c. Unsecured bonds

Preferred creditors are those whose claims have precedence by law even though no specific asset is pledged as security. Employees have

[5] The order of listing of examples does not indicate any order of priority within each class.

a claim for wages up to a certain amount which have accrued for a specific period prior to failure. Secured creditors have a first claim upon those assets pledged as security for their loan, subject, however, to the claims of preferred creditors in some cases. Should the liquidation of these pledged assets prove insufficient to pay off the particular secured loan, the deficiency ranks with the unsecured creditors in the claim on the balance of the assets.

All unsecured creditors rank equally in claim to assets remaining after payment of preferred creditors, and secured creditors up to the amount realized from the sale of the pledged assets. For example, if $20,000 remained after taking care of all prior claimants and the unsecured creditor claims totaled $50,000, each unsecured creditor would receive 40 per cent of the dollar amount of the debt owed him.

2. The second advantage creditors have over owners is that they have a *specific promise* on the part of the debtor enterprise *to pay off the loan* in full *on a specific date.* The period to maturity may range from a few days in the case of a loan from a bank or finance company to occasionally as much as several hundred years, as in the case of the West Shore Railroad Company, First Gold 4% bonds due in 2361. The failure to pay on the stipulated date constitutes a default on the contract, and the creditor may seek a remedy at law. He might petition a court to appoint a receiver to administer the business and pay off the creditors either through liquidation of the business or through reorganizing it for their benefit. Owners, however, as mentioned earlier, have no maturity to their investment, although it may be permissible to withdraw it in part under some conditions. Their funds are sunk in the business permanently and can be regained only through sale of their interest or liquidation of the business, and then there is no assurance that the selling price or the liquidating value will be equal to their original investment.

A maturity date tends to lessen risk for the creditor. The shorter the maturity, the less the risk. Maturity forces a day of reckoning upon the business. The sooner that day is in arriving, the fewer the unforeseen events which may flow out of the future to reduce ability to pay. For that reason, the short-term creditors, such as the bank and the trade creditor, are regarded as assuming a lesser risk than other suppliers of funds. Longer term debt assumes a greater risk, which may cause a demand for a counterbalancing element of security in the form of a pledge of long-lived assets, such as real estate. When it is very distant, the maturity may reduce risk but slightly. However, a common provision in formal debt agreements, especially of long maturity, is a provision

that it shall be "accelerated" and the full claim become immediately payable, both principal and accumulated interest, in the event of any default on interest payments.

3. Creditors are further secured as compared with the owners in that they are given *priority* of income over the owners whenever such creditors are to receive a specific rate of interest. Of the five kinds of creditors described earlier in this chapter, those represented by the Accounts Payable and the Accruals receive no interest for advancing funds to the enterprise.

Although trade creditors are paid no specific interest upon the accounts owing them as a rule, they may obtain the equivalent in effect by setting the selling price of their goods high enough to cover their costs, one of these costs being the cost of money tied up in their customers' indebtedness to them.

Not only do the creditors have priority of income over the owners, but *the payment of their interest is mandatory.*[6] Failure to pay it when due is grounds for the creditor to take legal action to collect it just as much as is default on the principal at maturity.

Income

Creditors differ from owners as a general class in the matter of income distribution on three counts, *limitation, size,* and *certainty.*

1. The rate of return to creditors is *limited* to a specific amount, while the return to the owners is theoretically unlimited. Before money is advanced to the business, an agreement is reached between the creditor and the owner or owners as to the rate of return the creditor is to receive for the use of his funds. This rate, once fixed, sets the limit to the income the creditor receives no matter how high the earnings of the business may go. The return to the owners, however, is not fixed. Since they receive all income after payments to the creditors and income taxes, their return will fluctuate with the fortunes of the business.

2. In the matter of *size of rate,* creditors as a class expect to receive a lower return on their contribution of funds than do the owners. This is illustrated by the data of Table 1 showing the annual average return on new issues of corporate bonds and average commercial and industrial bank loans compared with the return on net worth (owners' investment) of leading manufacturing corporations. Any such comparison

[6] The rare exception is the income bond customarily used in corporate reorganizations. Here the interest is payable only if earned. Unpaid interest may or may not accumulate as a claim in those years in which it goes unpaid because of a lack of earnings, as in the case of cumulative and noncumulative preferred stocks described later.

TABLE 1

ANNUAL AVERAGE RETURN ON NEW CORPORATE BONDS, SHORT-TERM BANK LOANS, AND NET WORTH OF MANUFACTURING CORPORATIONS

(In per cent)

Year	Average return on newly issued corporate bonds [a]	Average of rates charged customers by banks in principal cities [b]	Return on net worth of manufacturing corporations [c]
1925	5.75	5.0	10.5
1926	5.61	5.1	10.8
1927	5.34	5.0	9.0
1928	5.24	5.2	11.5
1929	5.34	5.8	12.8
1930	5.17	4.9	6.4
1931	4.80	4.3	2.3
1932	5.73	4.7	(0.5) [d]
1933	5.23	4.3	2.5
1934	5.03	3.5	4.3
1935	3.98	2.9	6.7
1936	3.67	2.7	10.4
1937	3.59	2.6	11.1
1938	3.48	2.5	4.8
1939	3.36	2.1	8.5
1940	3.10	2.1	10.3
1941	3.07	2.0	12.4
1942	3.22	2.2	10.1
1943	3.39	2.6	9.9
1944	3.09	2.4	9.8
1945	3.00	2.2	9.3
1946	2.75	2.1	12.1
1947	2.85	2.1	17.1
1948	3.20	2.5	18.2
1949	3.13	2.7	13.9
1950	2.94	2.7	17.1
1951	3.35	3.1	14.4

[a] *Moody's Industrials*, 1952.
[b] *Federal Reserve Bulletin.*
[c] *Economic Bulletin*, National City Bank of New York.
[d] Parentheses indicate deficit.

can present only a rough picture of the relative position of the two groups contributing funds to the business because of the inadequacy of the data that is available save for a sample of major business corporations.

The rate of return on the bonds shown probably somewhat understates the average return to long-term business creditors generally because bonds are issued only by larger enterprises and by those with better than average credit standing. On the other hand, the return to owners is probably higher than that for all business concerns because these figures include only the larger and on the whole more successful firms.

The particular rate of return paid to any creditor by a business of course varies with many factors. As will be developed in later chapters which deal with the financing of the enterprise, generally speaking the better the credit standing of the firm, the lower will be the rate it will have to pay for funds. And even the same concern may pay different creditors different rates depending upon the duration of the loan and the security offered to the creditors. While the relative credit standing of the corporations borrowing by the sale of bonds (column 1) and those businesses borrowing from banks in leading cities (column 2) is unknown, they undoubtedly represent above-average credit standing. In general the shorter term bank loans show a lower rate of return except in the year 1929, when the reverse was true.

3. The creditors' income is also more *certain* than that of the owners. Interest is a mandatory charge on the enterprise. It must be paid when due or the creditors can close the business. The owners consequently make every effort to pay the amount owing to the creditors. Even though the business may be operating at a loss, interest will be paid if the cash is available. In small enterprises the owners will often cut their own salaries or go without them for some time in order to meet the fixed charges on the creditor funds and preserve the life of the business.

There is no such compulsion to pay out a cash return to the owners. Whether the owners get any cash return or not depends upon those in control of the enterprise. The owners will have a profit in all years in which the net income of the firm exceeds interest and taxes, but part or all of this profit may be retained in the business to take care of expansion or payment of maturing debts or for other reasons. One of the possible disadvantages of the owner's position is that even when the business earns a return on his investment, he may be compelled by circumstances to leave it in the business.

The position of creditors on the matter of income may then be summarized as follows: They receive a lower return than the owners hope

to earn if successful, their return is fixed in amount, and it must be paid when due if the business is to remain solvent and the owners are to continue in control. A further point mentioned earlier under the subject of risk is that creditors have a prior claim on income over the owners.

A special class of preferred owners (not to be confused with preferred creditors), known either as "limited partners" or "preferred stockholders," is created by some businesses. Such owners *may* have three of the above characteristics of creditors: they *may* (1) accept a specific and limited rate of return, and (2) have priority of payment for the income return, and (3), in the event of liquidation, have priority for their principal claim *over ordinary owners.* Any priorities are with respect to other owners and not as to creditors. Such preferred owners are not creditors, and any income claim they have is not mandatory but must be deferred if it is likely to interfere with the payment of creditor claims. Since the risk of such a position is greater than that of a creditor, the promised rate of return is likely to be higher.

Control

Creditors have no voice in running the day-to-day operations of an enterprise as a matter of legal right.[7] The groups of creditors supplying the bulk of creditor funds are in the business of lending money or selling goods to a large number of firms. They have little desire to participate in the management of the firms to which they are advancing funds. They have neither the personnel nor the money to take on this additional function. In fact, although the law provides that creditors may take over an enterprise or petition the court for the appointment of a receiver or trustee in case of default of either interest or principal of the loan, creditors go to great lengths to avoid this recourse. Before extending credit they will examine the financial standing of the business to decide whether or not there is much risk of default. If they feel that such a risk is high, credit will not be extended.

However, creditors often may be said to have some element of practical control by indirection. As a condition of advancing funds to an enterprise a creditor may insist that the enterprise agree to certain limitations on its activities as a condition to receiving the loan. A bank might require that the firm maintain a certain minimum cash balance at all times for the duration of the loan, it might put a limitation on owners' or officers'

[7] Voting bonds have occasionally been issued. In most instances that have come to the attention of the authors they were issued as a result of corporate reorganization. The old bonds (originally having no vote) were exchanged in reorganization for voting bonds, the voting privilege being given because of sacrifices of income and principal.

salaries and owners' withdrawals; a prospective mortgagee might insist on some limitation on further investment in fixed assets or require a limitation on the total amount of borrowing. All such limitations on the activities of the management are directed to further increasing the security of the loan. Once the funds have been advanced, the creditor would have no further part in control. He would merely make periodic checks to see that the agreement was being kept.

The general characteristics of the creditor position can now be summarized on the points of risk, income, and control. The form of business organization makes little difference in the position of creditors except in the matter of risk. They are in essentially the same position whether advancing funds to a proprietorship, partnership, or corporation except that in case of dissolution the creditors may find a means of payment from more than the business assets. In the first two forms of organization, not only do the creditors have a prior claim on the business assets as in the corporation, but in case the business assets are insufficient to meet their claims, they have recourse to the personal assets of the proprietor or partners subject only to the prior claim of personal creditors to the personal assets in a partnership. Consequently, to the extent that the proprietor or partners have personal assets in excess of personal debts, a creditor is better secured than in lending to a corporation with similar assets and debts.

The basic position of the creditors in the three forms of organization is the same in the matter of distribution of income and control. Because corporations are much larger in their average size, it might be argued that corporations are able to secure creditor funds at a lower average rate of interest. However, this idea represents confusion as to the influential factor, which is size and security rather than form of organization. So far as the legal form of organization alone is concerned, the credit standing of a corporation is somewhat less than for the partnership and proprietorship because of the unlimited personal liability of owners of the latter for business debts. In practice, the uncertainty of creditors as to personal assets of owners and as to their availability for business debts makes them a doubtful addition to credit strength.

Creditors have no control over day-to-day operations of the business. Their only influence on the business policies comes indirectly through restrictions placed on the action of the management at the time the loan is granted. Such restrictions tend to be more frequent the longer the term of the loan because of the greater risk involved. A skillfully managed business will also try to avoid financial practices likely to injure needed credit standing even though it might spell short-run profit.

Financial Characteristics of the Owner Position

Risk

The position of the owners in the matter of the allocation of risk, income, and control has already been touched upon in the preceding discussion of the creditor position. It will now be examined in greater detail on these three points. In the matter of risk, the owners occupy a residual position in relation to the creditor, and their investment consequently acts as a buffer to protect the investment of the creditor. If the business experiences a loss, it is the owners who bear the loss. There is no sharing of losses between owners and creditors. If losses persist or if a single loss is large enough, the owners' investment may be wiped out. It is not until the owners' investment has been lost that the creditor suffers.

And, as has already been mentioned, in the case of the proprietorship and partnership, when business debts exceed business assets, the owners may lose not only their entire investment in the business but part or all of their personal assets as well. The absence of personal liability of the owners of a corporation beyond their investment in the corporation has been one of the primary factors contributing to the rise of the corporation as the dominant form of business organization among large business units in our economy today. It attracts investors who are willing to be owners but would be unwilling to risk all their personal assets in any business.

Small business units are more generally unincorporated. The disadvantage of unlimited personal liability is not so serious in the case of the small business where all the owners take an active part in management. The active business owner is able to watch the day-to-day operations and take steps to halt practices which he may feel injurious to his position. In the large-scale enterprise, however, where appeal must be made to numerous investors for ownership funds, it is not feasible for each to take an active part in the business. Thus the use of a type of organization which limits liability makes possible raising funds on a larger scale.

The ownership investment in an enterprise is in most cases a permanent investment for the duration of life of the business. There is no maturity date for the return of principal as there is in the case of funds advanced by the creditor. The owner can look forward to the return of investment only in the case of liquidation or the sale of his interest. Involuntary liquidation usually results from inability of the enterprise to meet creditors' claims, and in such a case it is seldom that the assets can be liquidated for enough to repay any part of the owner's investment after meeting creditors' claims. Generally the owner loses his entire investment.

While most businesses are organized by their owners with the hope

that they will be successful and be continued indefinitely, some are organized with a definite time period in mind or to accomplish a specific task. The completion of the work for which they are organized will generally provide cash or other readily divisible assets which will make for an easy and voluntary liquidation and reimbursement of the owners. The organization of a partnership by three veterans to purchase rubber life rafts from the War Asset Administration and market them during the summer season to resorters would be an example of a business expected to end in voluntary liquidation.

In the case of proprietorships, partnerships, or small, closely held corporations, an owner has little assurance that he can withdraw his investment through sale of the business. If the enterprise is unsuccessful, there will be practically no market for it, and even if it is profitable, the owner may have a difficult time locating a buyer. Stockholders in widely held corporations can withdraw more easily by means of sale of their stock interest because of a wider market for the stock, but whether they realize their original investment will depend on the market's appraisal of the prospects of the enterprise and business conditions at the time of sale.

The partner in a partnership may be at a greater disadvantage than either the sole proprietor or the stockholder in attempting to liquidate his investment by sale. The very nature of the partnership form of organization, which requires the formation of a new partnership whenever the personnel of the partnership changes and the consent of all the general partners to the admission of any new partner, makes the sale of a partnership interest hard to effect. The withdrawal of a partner would force the liquidation of the assets of the business at what might mean a considerable loss unless the remaining partners were willing and able to buy out the retiring partner and form a new partnership. To sell an interest to an outsider requires locating a buyer who not only will pay a satisfactory amount but also will suit the other partners and agree upon a new set of articles on such important matters as division of profits and the function he is to perform in the firm.

The point made above concerning transferability of the ownership interest in a partnership emphasizes the impermanence of this form of organization as contrasted with the corporation. The fact that death or withdrawal of a partner terminates the partnership and may force liquidation at a loss adds to the risk of the owners in this form of organization, a risk not present for stockholders.

Income

The owner's share in income is a residual one and consists of whatever amount is left after paying all expenses and any interest to creditors.

Unlike the income of the creditors, that of the owners is generally variable. No compulsion is attached to payments to owners. In the proprietorship and the partnership the owner makes withdrawals as needed (subject to agreement in the partnership), and in the corporation dividends are declared by the board of directors. The earnings of the enterprise available for the owners fluctuate with the fortunes of the business. In periods of prosperity they may be high, while in periods of depression there may be none and the business may operate at a loss (see Table 1). As earnings increase, withdrawals and dividends tend to increase, but if a business needs most of its earnings for expansion or retirement of debt, cash payments to the owners may be curtailed or eliminated.

In the partnership profits and losses are divided by agreement (otherwise equally) without regard to capital contributions, although the latter can be made the basis of sharing. In the corporation, when dividends are declared, each share of stock of a given type must receive the same dividend treatment.

The different treatment accorded the income of the corporation for Federal income tax purposes may sometimes be the controlling factor in the choice of the form of organization, and it often affects the amount of income, especially in closely held corporations. In all the forms of organization, the share of income going to creditors is treated as a business expense and deducted before the computation of income tax on the business profits. The remaining income of the proprietorship and partnership belonging to the owners is taxed as personal income to the proprietor or partners whether withdrawn or left in the business. The business unit in these two cases pays no Federal income tax. In the corporation any balance of income after payment of interest to the creditors is subject to a Federal corporation income tax. The balance remaining after this tax is the owners' profits. If all or part of this is paid out to them as dividends, the dividends are personal income to the owners and are subject to the full scale of personal income taxes without regard to the fact that they have already been subjected to the corporation tax. Clearly, any income paid out to the owners of an incorporated enterprise is subjected to double taxation.

The second, or personal, income tax may, however, be postponed indefinitely if the owners choose to leave the earnings in the corporation.[8] In some cases it is possible for stockholders to minimize their personal

[8] However, the Federal income tax law provides for personal income taxes when a personal holding corporation has been formed to evade the second tax by withholding incomes. Even an ordinary business corporation may be subject to penalty taxes if it withholds earnings that are unnecessary for the conduct of the business in order to reduce the personal income taxes of its stockholders.

income taxes by this device and still realize on the corporate earnings. As earnings are retained in a corporation, its ownership interest and earning power might be expected to rise. Eventually a stockholder may be able to realize a gain by the sale of his shares at a profit. Any resulting capital gain (if he has held his stock for more than six months) is taxed at only one-half the rates on ordinary personal income or at the maximum rate of 26 per cent if that is lower (1951). For a stockholder in a high surtax bracket the maximum capital gains tax is much less than he would pay if a similar amount were received in the form of dividends. However, retained earnings may be wiped out by subsequent operating losses or losses in liquidation, or they may fail to increase the sale value of the stock by an amount as great as the earnings retained.

Whenever the business plans to distribute all profits to the owners each year, the double taxation under the corporate form of organization makes it inevitably more expensive than the proprietorship or partnership. The additional taxes become the price of obtaining the advantages of incorporation, such as limited liability and ability to appeal to a wider circle of owner-investors. On the other hand, if a business requires most of its profits for expansion and dividends are nominal or nonexistent, the owners, especially if they are well-to-do, may find the corporation tax less than the personal taxes they would pay under the proprietorship or partnership, where distribution has no bearing upon taxability. In some small businesses the bulk of the net income is paid out as salaries to the owner-operators, and in such cases the burden of the corporate income tax is an unimportant factor.

In the partnership, profits are often accepted as a mixed return for capital and effort, and so the partners' share of the profits is often based on the expected contribution of both elements. In fact any provision for "partners' salaries" or "interest on partners' capital" is regarded as merely a device for establishing the shares and priorities for partnership profits. In the corporation all persons working for the corporation are typically paid for their efforts in salaries, and all net profit of the corporation is regarded as wholly a return to stockholders for the use of their invested capital. In small, closely held corporations where the officers are also the major stockholders, there is some room for the setting of salaries so as to reduce the corporate income tax since salaries are a deduction before the computation of net profit for corporate tax purposes. The result is that such income is subject only to the personal income tax of the recipient. For this reason income tax reports from corporations in this position are generally scrutinized with care by the Bureau of Internal Revenue. If the salaries paid stockholder-officers are greatly in excess of what seems reasonable for the functions performed, the excess may be added back

to the taxable corporate net income and the distribution regarded as dividends. On the other hand, officers may deliberately take rather less than a normal salary for their services with the idea of paying the corporate tax on the increased profit and leaving it in the business as retained earnings for expansion.

Control

In all three forms of organization the owners as a group have full control over the operations of the business. The proprietor, since he is the sole owner, retains all control except that which he may delegate as he sees fit to subordinates. This form of organization permits the greatest centralization of control, the greatest flexibility in policy, and the greatest secrecy in the operation of the enterprise. There is no possibility for confusion or dissension, as there is when more than one person has authority in policy determination. Likewise changes in business plans can be made quickly and easily when there is no need for discussion and agreement.

Partners legally have an equal voice on matters of day-to-day policy. Practically, however, functions may be divided by mutual agreement. A partner who has contributed most of the capital might also by virtue of his position dominate major decisions. Such a position might be reinforced by a written agreement. The division of control among the partners and the necessity for unanimous consent on major policy matters hold the possibility of disagreement. Disagreement may result in dissolution of the partnership, with a resulting loss to the partners. The greater the number of partners, the greater the danger of disagreement.

With an even larger number of owners in the typical corporation, it would be impractical for each to take an active part in the management of the business. This situation is avoided by the stockholders delegating control on most matters to a board of directors, which determines the corporate policies. The various state corporation acts generally set forth a few major subjects which must be decided by the stockholders themselves and which cannot be delegated to the directors.[9] The delegation of authority in most cases is so complete that the stockholders seldom have to meet to exercise their control on matters of policy other than once a year for the election of directors.

The control exercised by the stockholder of a corporation differs from the control of a partner in two other respects. (1) Disagreement by a

[9] While each state act differs somewhat in its provisions on this matter, decisions commonly reserved for the stockholders are (1) sale or mortgage of all or a substantial part of the corporate assets, (2) consolidation or merger, (3) amendment of the certificate of incorporation, and (4) voluntary liquidation.

stockholder cannot cause dissolution of the corporation unless he controls a majority or even larger percentage of all the voting stock.[10] (2) Decisions are made by majority vote. The board of directors is elected by the stockholders at the annual stockholders' meeting. Typically each share of stock has one vote for each director to be elected. Thus a person or group holding a majority of the stock could control the corporation by electing all of the directors. The minority stockholders would have no voice in control. The board of directors, in turn, acting through majority vote, selects the officers to administer the corporation and determine its policies.

While the type of voting described above is that used in the vast majority of cases, a method of voting known as "cumulative voting," permitted in most states, allows a minority group of stockholders (provided sufficient shares are owned) a voice on the board of directors. Under this method of voting each share of stock is entitled to the same number of votes as there are directors to be elected. The votes may all be cast for one director or may be divided in any way the stockholder sees fit. Thus the holder of 100 shares of stock in a corporation which was electing 7 directors would have a total of 700 votes. All 700 votes could be cast for 1 director, they could be split 350 for each of 2 directors, or they could be divided up in any other manner.

By casting all their votes for one director, a group holding a minority of the total shares outstanding (if the minority was sufficiently large) could ensure placing at least one man on a board of directors. Under the ordinary method of voting the minority would have no representation. It is possible by means of a mathematical formula to determine the number of shares of stock that must be owned to elect one director.

$$\frac{\text{Total number of shares outstanding}}{\text{Total number of directors} + 1} + 1 = \text{number of shares of stock required (dropping any fractional shares)}$$

Thus, with a board of directors of 7 and 500 shares outstanding, to elect 1 director would require 63 shares.

$$\frac{500}{7 + 1} + 1 = 63$$

To determine the number of shares necessary to elect any given number of directors, one need only divide the total number of shares by

[10] The percentage of stock that must be voted affirmatively to cause voluntary dissolution is generally specified in the state business corporation act or the charter of the corporation.

the total number of directors plus 1, as above, multiply by the number of directors desired, and add 1. In this more generalized form, the formula would appear as follows:

$$\frac{\text{Total number of shares outstanding}}{\text{Total number of directors} + 1} \times \text{number of directors desired} + 1$$

$$= \text{number of shares of stock required (dropping any fractional shares)}$$

Or a group holding a given number of shares could determine the maximum number of directors it could elect by substituting the number of shares held in the right-hand member of the equation and solving for x, the number of directors possible of election. For example, holding 200 shares out of 500 outstanding, in the above illustration, 3 directors could be elected.

$$\frac{500}{7+1} \times x + 1 = 200$$

$$62.5x = 199$$

$$x = 3.18, \text{ or 3 directors}$$

When, as is often the case, less than all the outstanding shares are represented at the stockholders' meeting, then the actual number of shares present rather than the total outstanding will be used in the formula. This means of voting is essentially a method of providing proportional representation on the board of directors. A minority having some representation on the board, although still not being able to control the corporation, is better able to protect its interests than if it was not represented at all. It will be noted that a majority was required in the above illustration to elect a majority of the board.

The thoughtful reader may have wondered why the nonfinancial factor of control is discussed here. The reason is that it is a factor influencing the selection of the form of financing. The owners of the small or medium-sized business are particularly anxious to avoid financing that distributes voting control in outside hands. Large corporations, however, whose management owns less than a controlling interest, may find that wider distribution increases the difficulty of organizing an opposition.

While all control of the business enterprise legally rests with the owners, it may be restricted to some extent by contracts entered into with creditors, as discussed in the preceding section dealing with the general characteristics of the creditor position.

Appropriateness of Division of Risk, Income, and Control

The foregoing description of the allocation of risk, income, and control in the three common forms of business organization lays the basis for an analysis of how far these differences are fitting and appropriate for the financial relationships in the business unit. An understanding of these fundamentals will make for a clearer appreciation of why financing is handled as it is in practice. In the interests of concreteness, the discussion will take the form of brief analyses of three typical situations.

1. *Short-term creditor* (*bank loan*). Perhaps the most common reason for a business to seek a short-term loan from a bank is to permit carrying larger inventory or to expand its credit sales and carry the expanded investment in receivables over a seasonal peak. The contraction of sales, the sale of the inventory, and the collection of the Accounts Receivable furnish the cash to pay off the loan at maturity. A creditor making such a temporary advance of funds, when protected by an adequate credit investigation, is generally assuming the least risk of any of the major classes which furnish funds to the enterprise. The creditor looks to the flow of cash from the conversion of inventories and receivables, and the shorter the period, the less likely are events to occur which will wipe out the margin of safety that protects the creditor. The factor of early maturity plus the priority of claim over the owners to assets in case of failure results in the bank being willing to advance funds for a comparatively low rate of interest. Because of this low risk the short-term creditor is willing to advance his funds without seeking any voice in operating control. Since the bank loan is of such a temporary nature, it might be argued that even if the banker were given some voice in control, there is little he could do in the short space of time that the loan is outstanding to better secure the payment at maturity.

2. *Long-term creditor* (*mortgage*). The mortgagee lends money to the enterprise for a long period of time. Risk, as pointed out in the preceding paragraph, is associated with the time factor. Any number of events could occur in the life of the firm that might prevent it from meeting the maturity of the principal of the loan some ten, fifteen, or twenty years hence. The risk is so great that the mere general priority of claim to assets over the owners is often insufficient inducement to obtain a loan for the business for this term of years. Or if the creditor were to invest his funds on this basis, he would demand such a large share of income (high rate of interest) that there would be an insufficient amount left to induce the owners to take their even greater risk. This impasse is avoided by giving the long-term creditor a prior claim over all other creditors

(except preferred creditors) and owners with respect to certain specific assets.

The assets pledged as security for the loan are the more permanent type of assets, typically real estate. Such assets cannot be readily dissipated through the operation of the business, and if failure occurs, they should have some market value independent of their use in the particular enterprise. The security resulting from the pledge of specific assets thus reduces the *risk* of the creditor and lowers the share of *income* that he will demand.

Because of the long maturity factor involved, the mortgagee will ordinarily insist on the owners agreeing to certain provisions to maintain the value of the property which is his specific security. In order to ensure ample protection, mortgagees will generally not lend more than one-half to two-thirds of the market value of the property offered by the mortgagor as security. To maintain the original margin of protection over the life of the loan, covenants in the mortgage may require that as the property gets older and presumably depreciates a stipulated proportion of the principal of the mortgage be paid off in installments.

The relation of time to risk explains why it is typically harder to obtain long-term funds than short-term funds. The point is most true of small business enterprises because of their high mortality rate and because many of them have few or no fixed assets suitable as mortgage security.

3. *An owner (general partner).* The chance of a total loss of the owners' investment in a small business is considerable. Because the practical limit to the amount of capital that can be raised by most partnerships is low, it means that they are concentrated for the most part in lines of business that do not require a large investment. Competition thus tends to be greater because of the ease of entering the field. Failure can occur for any number of reasons: inexperience of the owners, inadequate capital to begin with, starting the business just before the downturn in the business cycle, too heavy an investment in fixed assets, heavy loss on unsalable inventory or from style changes, or accumulation of bad debts. Any loss in value of the assets is borne first by the partners; their investment is a protection against asset shrinkage for the creditors.

To counteract the possibility of loss, a prospective partner must have the inducement of an off-setting possibility of large income. A prospective owner with available funds has a number of alternate forms of investment of those funds to choose from. He may put them into an enterprise as a creditor, assume little risk, and receive a small fixed income. He may invest as an owner in a large, well-established enterprise with a long record of successful operation behind it and whose stock is widely known and readily resold in a stock market. As a part owner in such an enterprise

he would assume more risk than as a creditor, but there would be small likelihood of complete loss of principal, and he would receive a somewhat higher, though more irregular, income. The inducement must be large to convince him to put his money into a new or recently established firm, subject to the greater hazards of a small business with untried management, and subject to all the hazards of impermanence that are associated with the partnership form of organization as such. It is but logical that the owners under these circumstances are persons who expect compensatory *income,* in the form of high prospective return on capital or job income, and likewise a large voice in *control.*

Comparative Advantage in the Use of Creditor Funds

Advantages

Practically all business enterprises make use of creditors as a source of funds to a greater or lesser degree. The proportion of borrowed funds used will vary considerably from business to business and will vary over a period of time within the same business. From the foregoing discussion of general characteristics of the creditor and owner position it is possible to summarize the important advantages that will or may accrue to owners from the use of borrowed funds.

1. *No sharing of control.* Since the creditors have no voice in the operations of the business, owners may extend the scope of their operations by using funds furnished by creditors and still maintain their same position of control. Raising of additional funds by bringing more owners into the business would usually involve the sharing of control with the new owners and, if the proportion of new capital raised in this manner was large, might eventually result in the loss of control.

2. *Low cost.* It has been pointed out that because of the prior position given creditors in the matter of claim to income and to assets in dissolution they generally will accept a relatively low and fixed income as compared with that expected by the owners. Thus, if additional funds can be used profitably in the business, and if the owners have a choice of the source of those funds as between creditors or owners, the funds can be obtained at a lower cost from the former class.

When a concern uses creditor funds or ownership funds with a limited return, it is said to be "trading on equity." One of the primary reasons for borrowing is to secure funds at a lower cost than the funds will actually earn when employed in the business. When this aim is accomplished, it has the effect of raising the return to the owners (other than those with a limited return) above that which they would receive had no other sources of funds been tapped. On the other hand, if this

hope of larger return to the owners is not attained—if the business earns a smaller percentage return on its total investment than must be paid to the creditors—the owners will receive less than they would if they had supplied all the funds.

This is illustrated in the following example of a corporation with a mortgage of $100,000 and an investment by the common stockholders of $100,000, a total investment in the business of $200,000.

Item	First year		Second year		Third year	
	Amount	Per cent	Amount	Per cent	Amount	Per cent
Earned on total investment	$10,000	5	$20,000	10	$5,000	2½
Interest on mortgage (5%)	5,000	5	5,000	5	5,000	5
Return to common stockholders . .	5,000	5	15,000	15	0	0

In the first year the earnings on the total investment were 5 per cent, and since 5 per cent interest had to be paid on the mortgage, the owners received no increased return because of their use of creditor funds. In the second year, however, earnings on the total investment were at the rate of 10 per cent. Only 5 per cent was paid on the mortgage, leaving the stockholders not only the 10 per cent earned by their half of the total investment but the extra 5 per cent earned by the creditor's half of the total investment, or a total return of 15 per cent. Earnings on the total investment in the third year were at a rate of only 2½ per cent. The money invested by the mortgagee did not pay its own way. The owners had to make up the difference between 2½ per cent and the 5 per cent guaranteed the creditor from the earnings of their share of the total investment, with the result that they earned nothing for the year. Had the earnings on the total investment been less than 2½ per cent, the business would have had a deficit, which would have eaten up so much of the owners' investment.

The dangers of the use of creditor funds are treated at greater length in later discussion. The owners in deciding to trade on the equity must weigh the hope for greater profit against the danger of a smaller return or possible insolvency.

3. *Only funds available.* In many cases, particularly for small enterprises, creditor funds may be the only source of additional funds available. The point has been made previously of the greater risk of ownership

in small firms because of possible lack of adequate capital, inability to secure and pay for first-class management, and the greater competition in many fields because of the low initial investment involved. There are no ready means of tapping the public for additional ownership funds such as are open to moderate- and larger-sized corporations through the use of investment bankers. Because of the small amount involved, the cost would be prohibitive even if the public was interested. The small businessman must then have recourse to his friends, business associates, and relatives. If they are not inclined to make an investment, the opportunity to secure additional ownership funds is closed to him.

A much more ample supply of creditor funds is available. Commercial banks, finance companies, and trade creditors are generally willing to lend to small as well as to large firms provided an adequate margin of protection is available for the loan. It is more often true, however, of the small firm than of the moderate- or large-sized firm that the credit standing is so poor that creditors will refuse to advance any funds or only very limited amounts.

4. *Flexibility.* Many enterprises because of the seasonal nature of their business have a temporary demand for additional funds to carry heavier inventories or Accounts Receivable. When this is the case, it is generally more advantageous for the firm to obtain these additional funds from creditors than owners. An owner puts his funds into a business as a permanent investment and seldom expects to get them back from the business itself. Because of the permanent nature of the investment he expects to obtain an adequate income from the funds for the whole period of investment. However, if an enterprise resorted to the use of owners' funds to finance the seasonal peaks, it would mean that there would be a period each year when the funds were not being used. This would have the effect of lowering the rate of return earned by the owners. If creditor funds are used to finance the seasonal need, the loan can be retired as soon as the need for it has passed. The profits of the business, less the interest on the loan, are spread over a smaller owner's investment, with a consequent larger rate of return on that investment.

5. *Tax saving.* When all a corporation's funds are secured from owners, income taxes are levied on all the net income. If part of the funds is obtained from creditors, the income tax is levied only on that balance belonging to the owners. The share of income paid to creditors is considered a business expense deductible in the computation of income taxes. Thus a substantial saving may result to the firm from the use of creditor funds. The financial managers in deciding on the proportion of funds to secure from creditors must weigh the tax saving against the added risk involved when creditors' funds are employed.

6. *Convenience.* This point is of least importance, but it does account for the appearance of some creditor accounts on the right-hand side of the balance sheet. It is more convenient to pay labor weekly or biweekly than every day. The periodic payment of wages gives rise to Accrued Wages on the balance sheet, indicating that the employees are creditors. Likewise, it is more convenient to buy supplies and inventory on open book account from trade creditors and route the invoices in an orderly manner through the bookkeeping department for payment than to pay cash on or before delivery. The open account also facilitates handling of returns and shortages in shipment.

Disadvantages

The primary disadvantage of the use of creditor funds is the risk to the owners' investment from the inability to meet the creditors' claims when due. The danger is twofold: the greater problem, that of meeting the principal payment at maturity of the loan; and the second, less of a problem because of the smaller sums involved, that of meeting any periodic interest payments. The shorter the credits, the greater the potential risk to the owners because of the problem of prompter repayment. An owner, on the other hand, whether proprietor, partner, or stockholder, can never legally force a payment to himself that will endanger the ability of the business to care for its creditors. However, it must be remembered that in partnership, unlike the corporation, a partner may bring a business to an end and force liquidation with considerable loss of values when the term of the agreement has expired. Such a liquidation could be forced upon a corporation only by the positive action of the owners of a majority, or even more, of the stock, in accordance with the terms of the charter and the law of the state in which the corporation is chartered.

Reference has already been made above to the possibility of reduced return to the owners from trading on the equity in those years when the business earned a lower percentage return on its total assets than it was paying on its creditor funds. The point has been stressed that new owners will invest only if they can hope for a higher rate of return than ordinary interest. However, an equally important point, sometimes underrated by the optimistic businessman, is that a new fellow owner, unlike a creditor, will share losses as well as profits.

Special Types of Owners

The preceding analysis of the comparative advantages of financing through credit vs. ownership has been in terms of the most common

ownership arrangement. In the partnership, the usual owner is a *general* partner; in the corporation, the owner is ordinarily a holder of *common* stock. This oversimplification has been followed to avoid possible confusion in the discussion of fundamentals. Occasionally special forms of ownership contract are drawn to create variations from the conventional risk-income-control character of the owner so as to create a more creditor-like relationship. In the partnership, this variation takes the form of *limited* partners, who may be given certain preference over the general partners; in the corporation, a group of holders of *preferred* stock may be created. Sometimes, though rather infrequently, a special class of *common stock with preferences* is set up.

One of the primary reasons for introducing another class of owners is to enable the enterprise to obtain funds from a class of people or institutions who might not otherwise be interested in investing in the firm. It permits the promoters of a new business or the owners of a business already in operation to shape the ownership instruments so that they will allocate risk, income, and control in a manner more attractive to those who have funds to invest. The net effect is that by classifying owners into different groups by one or more of these arrangements the concern widens its sources of funds. In addition, use of these special ownership forms may permit retention of control among the original owners, and it permits of obtaining the benefits of trading on equity.

Preferred Stock

Preferred stock is stock that is given a preferred claim to income over the common stock. For this priority preferred stockholders are typically willing to take a limited return, in this respect being similar to creditors. However, because their claim to income comes after that of the creditors, they will expect to receive a higher rate of return than the latter.

Their position as regards income differs in one other principal respect from that of creditors, namely, that the payment of dividends is contingent on their declaration by the board of directors, whereas interest on the debt must be paid if the business is to remain solvent. In other words, a maximum rate of return that the preferred stockholders may receive is set, but the actual payment is contingent upon the ability of the corporation to pay and the willingness of the board of directors to vote the payment. Generally the stock is cumulative, which means that if the stipulated preferred dividend is not paid in full in any period, the unpaid portion accumulates as a claim and must be paid in full before the common stockholders can receive any dividends. While this freedom from legal compulsion could be abused, especially by a corporation whose common stockholders had little interest in immediate dividends, directors

generally feel morally obligated to pay preferred dividends whenever the finances of the business will permit.

As added security the preferred stock is generally given a preference over the common stock in the claim upon assets in liquidation. Like the income, this claim on assets is limited. It is generally set at a per share figure equal to the amount originally paid in, or only slightly above it, plus any accumulated and unpaid dividends. Because preferred stock is an ownership interest, its priority will be only with respect to that of the common stock. It will be subordinate to all the creditor claims.

Reference has previously been made to the nature of the owners' investment as a permanent investment in the sense that it does not mature on a specific date like a debt. This principle is just as true of the investment of the preferred owners as of the residual or common stockowners. However, in issuing preferred stock, the business usually retains the right to call, or pay it off. This right is reserved for one or more of several reasons. If the stock was originally issued with a high dividend rate, the company may be able to replace it at a later date with a lower dividend issue as its credit standing improves or if the general level of interest rates declines. (The going rate of return for preferred stocks tends to rise and fall with the current going rate of return for bonds.) Or it may be that some time in the future the company may have an excess supply of cash on hand which it cannot employ profitably in the business. Rather than pay dividends on the preferred stock, which would mean paying for money which it was not using, it could retire the stock. As a compensation to these stockholders for having to give up their investment involuntarily in such a case, the charter of the corporation often provides that the stock be callable at a premium above its par or issue price.

In order to reduce the risk for the investors in the preferred stock, the corporation might incorporate into the agreement a regular plan for the retirement of the stock. Just as in the case of long-term debt reduction by a systematic plan, the retirement of a preferred stock reduces risk by reducing the amount of the claim and increasing the relative margin of protecting assets and earnings. The sum set aside each period is called a "sinking fund." Actually, instead of accumulating a true fund, it is customary to use the monies within a short time to buy shares in the open market, or to seek tenders (that is, offerings) from stockholders. If neither method produces sufficient shares at a price lower than the call price, stock is picked by lot for redemption at the call price. These recurrent purchases provide an artificial market that tends to support price and reduce risk of principal loss for those obliged to sell their shares. The sums set aside may be either fixed or variable or a combination of the two. Thus, a manufacturer with variable earnings might provide a

sinking fund amounting to a fixed 2 per cent of the original preferred stock issue plus 10 per cent of all net earnings over and above the preferred dividend.

In the majority of cases preferred stockholders have no voice in control. Most state business corporation acts permit preferred stock to be either voting or nonvoting at the option of the issuing corporation, and generally the stock because of its preferences over the common in other respects can be sold without the voting privilege.[11] Occasionally a nonvoting preferred stock will be given voting rights upon the failure of the directors to declare dividends for a given time interval. There is a logical justification for such a provision. The preferred stockholders waive control as long as they secure their limited income. Failure to receive the dividend puts them in the residual position of the common stockholders. Failure to pay preferred dividends raises a question as to the adequacy of the corporation's earnings. If the earnings are not going to be sufficient to cover the preferred dividends with some margin to spare, the risk attached to the preferred investment has increased and with increased risk there is a corresponding increased interest in control.

Preferred owners often place restrictions on the scope of control exercised by the common stockholders with provisions somewhat similar to those mentioned in connection with the long-term creditors. These are designed to protect their position and prevent subsequent increases in risk. Thus the corporation might be prohibited from mortgaging the assets of the corporation without the consent of a stipulated per cent of the preferred owners, it might be prohibited from issuing any securities with a claim on earnings or assets prior or equal to that of the preferred stock without the prior consent of the preferred owners, or a sinking fund might be required to be set aside out of earnings before common dividends could be paid.

In summary, it is apparent that the position of the preferred stockholder with respect to risk, income, and control is midway between that of the creditor and the common stockholder and is subject to considerable modification within these limits, sometimes approaching the position of the creditors and sometimes more nearly approaching the position of the common stockholders. The creditor position would be approached by an issue with cumulative dividends, a prior claim to assets in liquidation, no vote, such ample earnings that there would be little danger of nonpayment of dividends, and a substantial fixed sinking fund which would retire the whole issue within a comparatively short span of years, thereby giving the equivalent of maturity. The main dif-

[11] Under the Illinois law, all stocks of corporations chartered in that state must be given the voting privilege.

ferences between such a preferred stockholder and an unsecured long-term creditor in such a financial arrangement would be that the creditor would have a *fixed* mandatory claim with respect to both interest and principal as they become due, while the claim of the preferred stockholder for both his dividend and sinking fund, if any, is *contingent* upon the ability of the corporation to pay and the willingness of the directors to order the payment.

At the opposite extreme would be a noncallable preferred stock, preferred only for a noncumulative dividend, voting share for share with the common, and sharing alike with the common in liquidation and permitted to receive a dividend of more than the stipulated preferential rate whenever the common dividend reached a certain point. When a preferred stock is permitted to receive a dividend of more than the stipulated preferential rate, it is said to be "participating." Preferred issues with the first set of characteristics are far more customary than those with the latter characteristics.

Limited Partner

The limited partner constitutes a second class of owners in a partnership, just as preferred stock constitutes a second class of owners in the corporation. By bringing in limited partners, a partnership may increase its size when it might otherwise be unable to obtain additional funds from general partners. Legally the position of the limited partners differs in three important respects from that of the general partners on the matter of risk and control. The most that the limited partner could lose in the dissolution of the partnership would be his stipulated capital contribution, provided all the legal requirements have been carefully met, whereas it is possible for the general partners to lose not only their partnership investment but most of their personal assets as well. The liability of a limited partner is *limited.* Second, in liquidation the limited partner has a prior claim over general partners to assets remaining after the payment of all outside creditors. This priority applies both to profits and capital contribution. The third difference is that the limited partner is forbidden by law to take part in control if he is to retain the limited liability privilege.

Because of their preferred position limited partners are often given a limited income, possibly 6 or 7 per cent. Like preferred stockholders in the corporation this rate would tend to be higher than that paid long-term creditors because of the higher risk involved. They might receive no share in income above this amount or might share the balance in any agreed plan of sharing with the general partners. Such an extra

sharing would represent a recognition of risk for which a mere 6 per cent and priority would be insufficient compensation.

As in the case of a preferred-stock issue, some plan can be made for the repayment of the limited partner's investment. In any case, if the partnership was for a short period of years, as is customary, the problem of either repayment or a satisfactory agreement for renewal at the end of the term would have to be met. A corporation, on the other hand, ordinarily will have a life for a long period, such as twenty years, or may even run in perpetuity.

The relative priority or lack of priority to assets and income and the amount of income that the limited partners would be given would depend on their bargaining position at the time of formation of the limited partnership. If the general partners were particularly anxious to raise additional funds, they would be willing to give strong inducements to prospective limited partners in the way of security of principal and amount of income.

Classified Common Stock

Classified common stock is merely a designation applied to the common stock of a corporation when it is divided into two or more classes which differ in one or more respects in their right to income, control, or priority of claim to assets or earnings. It is usually designated Class A, Class B, etc. The device is one that permits of greater flexibility in dividing up these various rights among the owners than is the case with the more usual preferred and common classification. The basic feature of preferred stock, the preference as to dividends, may be omitted in classified common stock. Some classified common issues, however, have had this and other features such that the issue might have been appropriately designated as preferred. Whenever the risk and income, the two features of dominant investor interest, are such that the stock seems more like common than preferred stock in quality, the designation of classified common would seem to have the merit of greater appropriateness. In times of business optimism and speculative enthusiasm, the designation of common might have greater appeal than that of preferred.

Some of the ways in which classified common stock may be used to apportion these rights are illustrated by the following examples:

1. A Class A common that is a typical preferred stock with priority to income and assets, cumulative dividends, and no vote. As suggested above, it would be more logical to adopt the "preferred" designation unless some characteristics made it resemble common. Such resemblance

might be created by a participating dividend feature and a high call price, provisions that would represent compensation for risk.

2. A Class A that is exactly the same as ordinary common except that it is nonvoting. Such a nonvoting arrangement contradicts our general principle that control should go to those who bear the residual and maximum financial risk. The idea is now generally frowned upon, and the New York Stock Exchange will no longer list such stocks for trading on its floor, although a few old issues of this sort still are found there. The argument for its use was that the general public investor in a business might prefer to have voting control lodged firmly in a part of the stock held by management or a financial group in which special confidence was reposed. Unfortunately, no check existed if such holders of the voting class of stock failed to live up to their trust or if the stock itself passed to other hands either by sale or by the death of original holders.

3. A Class A common given to an inventor-president that receives 10 per cent of all dividends declared, regardless of the total net profits, receives 10 per cent of all assets in liquidation, and is voting. Or a promotional-managerial group might receive shares that gave them a stipulated share of any earnings distribution like the inventor-president just mentioned as a reward for their contributions of services past and prospective. This proportion might appear disproportionately large when comparing their cash investment with that of the public supplying the cash through a separate class of common stock. Some might hold that the arrangement argues a confusion of labor return and capital return. Actually, a new business might not be able to pay salaries sufficient to attract men of the caliber necessary to ensure probable success, men with the abilities to give the venture a chance at profits high enough to make the public's common stock attractive through above-average earnings. For such persons the hope of capital gain from stock made valuable by their efforts might be worth more, dollar for dollar, than an equal amount of salary because of the high personal income taxes levied on the latter. Stockholders furthermore like to have top management owning substantial amounts of stock so as to give them added incentive to build earning power that will make all the stock more valuable.

Summary

The legal forms of organization, proprietorship, partnership, and corporation, have developed and grown important because they best meet certain economic needs, some financial and some nonfinancial, in the association of the factors of production to form a business unit. The

apportionment of the elements of risk, income, and control have a direct bearing on who will supply the funds, the amount that will be supplied, and the conditions under which they will be supplied. An understanding of the nature of these factors and how they are divided in the three forms of organization is thus essential in the study of business finance.

This chapter has analyzed the position of the creditors and the various classes of owners to see how these three factors are divided among them. Certain general relationships between these factors hold true no matter what the form of organization. Low risk is associated with low and limited income and a minimum of control. As risk is increased, there is a compensating increase in the amount of income allocated and a greater probability of participation in control. And in the extreme case, those who bear the maximum of risk will expect the bulk of any residual income and retain most or all of the control.

Attention has already been drawn to the difference in the average size of these different forms of organization. One of the principal purposes of varying risk, income, and control is to facilitate the raising of funds. At one end of the scale is the proprietorship with its limited flexibility in the allocation of these elements among the suppliers of funds, and at the other end of the scale is the corporation with its almost unlimited flexibility.

In a proprietorship where all funds are supplied by the entrepreneur, this individual bears all the risk, receives all the income, and has complete control of the enterprise. The only element of flexibility possible in this situation in dividing up these elements is that of securing some funds from creditors. This results in transference of some risk and income to this group, but generally no control.

Under the partnership form, the partners, as a group, like the individual owner, assume all the management, bear the risk, and receive the income. They may likewise transfer some risk and income to creditors. The flexibility of the apportionment of risk, income, and control is greater than that of the single owner in two respects: there may be any number of combinations among the general partners, and in the case of the limited partnership a whole new layer of owners is introduced. In a general partnership, for instance, one partner might supply all the capital and the other all the management, with an equal sharing of income. A possible disproportionate sharing of risk is introduced by the varying personal fortunes of the partners, which may be attached by creditors. Limited partners are differentiated from general partners as far as the allocation of these elements is concerned in that they are forbidden by law to take part in control and their risk

is limited to their partnership investment. Because of their lack of control, they are more often given priority to income and priority to assets in liquidation.

The flexibility of the corporation through the use of debt and common and preferred or classified common stock is practically unlimited. So far as legal arrangements are concerned, almost any division of the elements of risk, income, and control can be drawn. In its simplest form the corporation may parallel the proprietorship and general partnership with only one class of owners. With one class of preferred stock it may resemble the limited partnership, but only the corporation, of the forms of business organization discussed herein, can have more than two layers of owners.

The chief differences between the owners in the corporation and those in the proprietorship and partnership are in respect to (1) limited liability, (2) transferability of the shares, (3) permanence of the "form" of the business, and (4) treatment on income taxes. The first three, plus the flexibility in arranging risk, income, and control between the various layers of owners to best meet the requirements of those with funds to invest, account for the predominance of the corporate form of organization in those situations where there is a need for a large amount of assets. In some cases they may be important also in determining the form of organization for small-sized concerns, but where the concern is small and likely to remain small, the advantages of the proprietorship or partnership will generally outweigh them.

The corporation is at a disadvantage in the matter of income taxes except in those comparatively few cases where there are few owners of substantial means who can, through having the corporation retain its earnings, employ it as a device for tax saving.

Questions

1. What is meant by financial organization?
2. What is the meaning of the term financial risk?
3. What are the sources of this risk?
4. Why are some risks insurable and others noninsurable?
5. If all business risks were insurable, would we have business enterprise as we know it today? Why?
6. What are the means available for providing a distribution or sharing of the economic risks? Explain.
7. What general conditions make for a relatively safe business investment?
8. What is the general interrelationship of risk, income, and control?

9. What is the one invariable distinction between credit and equity from the standpoint of an investor?
10. What are the *customary* characteristics of a creditor's position with respect to risk, income, and control?
11. What are the *customary* characteristics of an owner's position with respect to risk, income, and control?
12. On the basis of this explanation, how would you define the term residual equity?
13. What are the significant motivating considerations leading to the use of credit in a business?
14. What are the special financial burdens or dangers that grow out of the use of credit?
15. How may the financial ends of debt financing be achieved through the use of an ownership instrument?

PART II

ADMINISTRATIVE TOOLS OF FINANCE: FINANCIAL ANALYSIS

Chapter 3. THE FORM AND CHARACTER OF BALANCE-SHEET INFORMATION

Scope of the Material

Since this book is concerned with the subject of finance, the question might be raised as to the place of accounting material here. Where the accountant is concerned with the proper method of recording and summarizing the multitude of transactions that are going on from day to day, financial management is interested in the summary results to guide its work. The product of the accountant is the tool of the finance man.

This section (Part II) is not concerned with the recording aspects as such. The only purpose is to review such rules as must be kept in mind if the tools are to be used effectively in financial control and financing. This chapter will consider the variety of purposes accounting material must serve and then highlight those fundamental ideas of statement construction needed to make the accountant's work as useful as possible and to avoid pitfalls that grow out of common misunderstandings. The limitations of accounting data will become more apparent in the subsequent chapters, where the customary methods of interpretation and analysis are studied. Even the reader familiar with accounting practice should find useful this review of the points significant for financial work since it will serve to remind him of the effect of taken-for-granted rules which contrast with the varying points of view of different financial users of the accounting statements.

Although any formal statements expressed in money values might be thought of as *financial statements,* the term has come to be limited by most accounting and business writers to mean the *balance sheet* and *profit and loss statement.* Because the detailed supporting accounting data may also be used by financial management for control purposes, restricting our attention to the formal summary statements might seem to some to constitute incomplete coverage of the subject matter. These detailed records, however, are used mainly by the various operating department heads; the financial administrator relies primarily upon the formal summaries.

An appreciation of how to interpret these latter will, of course, have value for others than those responsible for the general finances of the

business. Within the business, individual departments should see the influence of the general financial condition and profits on their own activities. A business lacking credit and profits may not be able to accede to the sales department's requests for expansion or easier credits to customers or to the operating department's request for new equipment. Outside of the business, as well, we find a large number of interested parties whose interest and point of view will be discussed shortly.

The balance sheet is a statement which reports the property values owned by the enterprise and the claims of the creditors and owners against these properties. As the term would imply, the values shown are as stated in the "balances" carried in the individual accounts of the business. The property values are spoken of as the "assets" of the business; the claims, as the "liabilities." Because liability commonly means debt and the claim of the owners is not indebtedness, some accountants prefer a more accurate label added to Liabilities to indicate the presence of the owners' interest. Such terms as Capital, Net Worth, or Capital Stock and Surplus are sometimes used.

The importance of this distinction between debt and owners' interest may be underlined by turning to the equation sometimes used to "explain" the balance sheet:

Assets = Liabilities plus Net Worth

The reason the two sides are equal lies not in any magical equalizing factor (not even the rule "Debits must equal credits" so painfully learned by the accounting beginner) but in the fact that the owners' share is not a rigid amount like debt but merely the excess of assets over debts. Its amount will vary with the value set upon the assets. The net worth will rise and fall to make the liability side equal to the asset side of the balance sheet.

In many ways it is preferable to think of the balancing of the two sides as the result of their reflecting two different aspects of one fact: the amount of funds employed in the business. The asset side, then, states the form in which the funds are being used; the liability side, the method of financing the funds. In this way the balance sheet becomes a statement showing the sources (liabilities and net worth) from which the business derived its funds and the uses (assets) to which the funds were being put on a given date. And in this sense the relationship is seen to be an identity rather than an equality: the same total value is merely expressed in two different ways.

The balance sheet in this form may be said to state the financial position of a going business as of the close of some business day, such as the end of the year or the end of some month. Between the dates on

which such statements are made up, numerous transactions are taking place which are constantly changing the amounts of the different asset, liability, and net worth accounts. It is possible but undesirable from a practical standpoint to provide a running account of the changes to a business's financial condition. However, a summary of the changes affecting any one of the accounts over a period of time might be made. Sometimes a formal classified summary of the cash receipts and disbursements is made for business purposes. Such a summary is known as a "cash statement" and is of the utmost importance to financial management, a point to be developed several chapters later. Generally, however, interest centers upon those changes which bring profit or loss to the owners, that is, increase or decrease in the owners' interest on the liability side of the balance sheet. This summary of changes in the owners' claim or equity resulting from operations for a period of time, properly arranged, constitutes still another important financial statement and is called the "profit and loss statement." It should be sufficiently complete to explain the net change in the owners' equity occurring from one balance sheet to the next. Any failure to do this calls for suitable supplementary information.

Uses of Statements

Management. The balance sheet, the cash statement, and the profit and loss, or earnings, statement are of importance to business management. The balance sheet, which shows financial position as of a given date, is useful in judging solvency. "Solvency" is the ability of the business to meet its debts. (The net worth is not debt.) The word solvency, however, may be used in two senses: first, the ability of the business to pay all its debts out of its assets in the event of liquidation, called "actual solvency"; second, the ability of the business to find the necessary cash to pay its liabilities as they become due, called "technical solvency." A business might be solvent in the former sense but have its funds so tied up in assets other than cash that it is technically insolvent; and vice versa, a business might be insolvent in a liquidation sense but not suffer from this because of the ability to meet its current maturing debts.

The central problem of financial management is to manage the assets so that sufficient cash will be available to meet debts as they mature and thereby prevent technical insolvency, which by forcing creditors to act might bring the life of the business to an end. Even if creditors did not take such drastic action, they might cease to extend credit and thereby cripple the business in its attempt to maintain the volume of

business necessary to maximum profitability. Consequently, management is somewhat concerned with the balance sheet and cash statement to determine whether the business is maintaining a position of technical solvency.[1] Assets should be suitably liquid, that is, should be actual cash or convertible into cash through normal business operations, within a period short enough to permit the business to pay its debts as they mature. (As later discussion will disclose, the liquidity of the assets depends not only upon the dollar amounts of the various items but also on their "quality.")

Technical solvency, or suitable liquidity, is the condition necessary for continuance in business. It is also essential to having access to new funds for expansion purposes. The object of continuing or furthering operation, however, is to realize a maximum of business profits or, if profits are not possible, to minimize losses for the owners. "Profitability" is therefore the counterpart to solvency in financial management. And success of the enterprise in this regard is determined through study of the profit and loss statement. Analysis of this statement should aid in the achievement of such success by bringing out sources of weakness, such as inadequate sales volume, insufficient profit margins, or excessive costs, and by helping to indicate where cost control is needed.

Keeping costs low means, in economic terms, the economical use of the factors of production: labor, capital, and land. Even an enterprise operated without a hope of profit in a socialist or communist society would need some control of this type if a maximum production of goods and services with the given supply of productive factors were sought. Under private competitive capitalism the management of each business, motivated by its own self-interest, becomes the watchdog of economy in a decentralized production system. When the individual watchdog loses his vigilance, he is likely to lose his economic existence unless protected by a monopoly situation or other special condition.

Short-term Creditors. Short-term trade and bank creditors of a business take a lively interest in the financial statements. Because their claims require payment within a short time, their attention is primarily given to the matter of technical solvency as revealed by the balance sheet. However, since they must allow for the hazards of a mistaken estimate, such as might arise from uncontrollable external business conditions, they are likely to give some secondary consideration to the question

[1] The qualifying term "somewhat" is used for the reason that although management gives some attention to these formal statements, if it is really concerned about its solvency it will make a special study of the individual asset and liability accounts in the ledger. Furthermore, as we shall come to see in later chapters, the protection of solvency is more dependent on planning than analysis.

of solvency in case of liquidation. Although the profitability of a business is also checked by such creditors, it is done in a more or less perfunctory manner because of the slight influence of earnings or losses on the financial condition of a business in the short run. A business that makes an unsatisfactory profit showing may continue to command credit so long as it does not suffer losses to the point of impairing its ability to meet its obligations promptly. On the other hand, a profitable business that unwisely ties up too many of its funds in assets that do not convert into cash as debts come due may be financially embarrassed or may even be taken over by creditors.

The chief points analyzed by these short-term creditors will be discussed in Chapter 5. Suffice it to say here that since the credit obtainable from such sources is important to many businesses, especially those of smaller size, creditor attitudes are important to the management of the business. Consideration, too, must be given to the customary credit standards of this outside group in financial planning.

Investors. In the smaller business most of the permanent funds, as distinguished from the temporary (even though continuous) credits of banks and merchants, are supplied by the proprietor or partners or a few owner-stockholders. In such cases the management is usually synonymous with the owner group. As the business increases in size, the probability grows that permanent capital will be drawn from the investor group, that is, persons who put funds in the business for the sake of investment return without expecting to participate in the active management. In a partnership such persons might be either limited partners or even silent general partners. In a corporation these investors could be stockholders, or if they wished to occupy a long-term creditor position, they might purchase bonds or a long-term note.

Because these investors are chiefly interested in the protection of their principal and their claim to income over a period of years, they will give first attention to the profit and loss statement. The balance sheet will also be of interest to them because any threat to solvency may destroy the ability of the business to continue as a healthy economic organism. Failure would even bring the possibility of wiping out some part or all of the claims of the investors, particularly the owners. Then, too, pressing debts, as revealed by the balance sheet, may even prevent a business that is making profits from distributing them to the owners.

Taxation and Regulation. The financial statements are also required by the government or governmental agencies in connection with taxation and regulation. Since both are only incidental to our subject at this point, a few important examples will suffice.

1. *Income taxes.* The Federal and some state governments levy taxes upon income. These taxes require data found in the profit and loss statement. However, the accounting for tax purposes must conform to the law and regulations, whereas, for other purposes, an element of managerial discretion is possible in the preparation of the statement, in such matters as depreciation, allowances for obsolescence, and reserves for contingencies and inventory losses. Occasionally, as in the computation of the Federal excess profits tax, the balance sheet is necessary.[2]

2. *Regulation of security issues.* When stocks or bonds are sold to the general public, financial statements have to be filed with the Federal Securities and Exchange Commission and sometimes with similar state bodies. The purpose of the requirement is to ensure availability of adequate information for the investor. The mere requirement of publicity has caused the abandonment of financing projects by persons with doubtful antecedents and in cases where an adequate description of the properties would reveal them to be quite inflated as compared with the prices of securities to be issued.

3. *Public-utility regulation.* The various public service businesses, such as railroads, electric, gas, telephone, and water enterprises, are regulated by Federal and state commissions in such matters as rates, quality of service, security issues, and accounting. In order to perform this regulatory function, the commissions prescribe the form in which accounting information shall be kept and the financial statements reported. The result is a uniformity of presentation which is especially valuable for managerial, investment, and economic analysis purposes.

Summarizing the uses of financial statements, they may be said to reflect for the informed reader the two principal aspects of business operation: solvency and profitability. The interested users are management, short-term creditors, owners, investors, and governmental bodies. This discussion might have been extended by enlarging upon specific usages, as where two businesses are to be united in a merger or a partner wishes to sell his interest. These, however, are but added examples of utilization by owners of the business, either stockholders or partners. In particular these cases involve valuation of the business, a subject which will be taken up in detail later but which may be said to depend mainly upon the factor of profitability.

[2] The excess profits tax is not a permanent part of the Federal tax law but rather is specially invoked during emergency periods—particularly wartimes. One way of determining "excessive" profits is by arbitrarily establishing "normal" or "reasonable" profits as a certain percentage of average investment. This investment figure can be ascertained from balance-sheet data.

Secrecy vs. Publicity. The question may arise as to how far financial statements are likely to be made available to investors and short-term creditors. Where an incorporated business has obtained funds from investors, it expects to give substantial information. Since the enactment of the Securities Act of 1933, corporations which sell securities to the public may come under Federal jurisdiction. And under the Securities Exchange Act of 1934 companies whose issues are listed on registered stock exchanges are obliged to publish annual financial statements of satisfactory fullness, and officials and others who receive more than certain sums must report upon such compensation and their holdings of securities. In addition, in most states corporations are required to open their books to stockholders under certain restrictions. These restrictions, however, which are designed to prevent outsiders, especially competitors, from gaining access to the intimate details of a business by buying a nominal amount of stock, often make this right of the stockholder to "inspect the books of a corporation" of little significance except where his holdings are substantial.

Since the beginning of the present century, bank, trade creditors, and institutional investors have brought increasing pressure to bear upon debtors to submit a certain minimum of financial statement information as a requirement for obtaining funds. And with the improvement in accounting practice among smaller business units since 1920, the practice of submitting balance sheets and even condensed earnings statements where credit is sought has become common.

Businesses, particularly those of small and medium size or which are owned by one person or a small group, are often loath to disclose financial statement material except where absolutely essential for credit purposes. They prefer that outsiders, especially competitors, should not know such matters as their gross profit margins, the amount of the net profit, compensation of owners, and their liabilities. If their profits are substantial or if their credit standing is not too strong, such facts might be used against them with their customers by competitors. Whatever the possible reasons for secrecy, the general belief in its value or necessity has greatly diminished in recent decades even though in particular cases it may be desirable. And as a result more and better financial information has been made available to nonmanagement users.

Essentials of Balance-sheet Information

Balance-sheet Form. Examination of most conventionally arranged balance sheets reveals that their form is designed to facilitate a study of the matter of technical solvency. The assets are listed in the order in which

they are likely to be converted into cash in the ordinary course of business and become available for debt-paying purposes. The liability side, similarly, is arranged in the order in which such claims are likely to create demands upon cash.[3] Thus, on the asset side the current assets are placed first before the fixed assets. The current assets are usually defined as those assets which are convertible into cash through the normal course of business within a short time—ordinarily a year. They consist chiefly of cash, accounts receivable from customers, and inventories, which are typically available in that order. Cash is immediately available, receivables as rapidly as customers pay up, and inventories only after they are sold and the consequent receivables collected. This "circulation" of current assets forms one of the major currents in the over-all circuit flow of funds described and illustrated in Chapter 1.

On the liability side, too, the current liabilities are placed first and followed in order by the fixed liabilities and owners' claims. The whole arrangement can be illustrated very simply by the following form:

Balance Sheet

Current assets	\$......	Current liabilities	\$......
Fixed assets	......	Fixed liabilities	......
		Owners' interests	......
Total assets	\$......	Total liabilities and net worth .	\$......

Asset Valuation. To understand and be able to *interpret* balance-sheet information adequately, it is necessary to keep in mind the accounting rules ordinarily followed. It was stated earlier that the balance sheet reflects the financial position of a business as of the close of some business day. This objective requires a presentation of the value of total properties and claims against these properties, and some rules must be adopted as to the basis of valuation to use. The accepted rules for stating the property, or asset, values are as follows:

1. *In general, assets will be introduced on the books and carried at their cost to the business.* The accountant advances three arguments for his general use of the cost basis in accounting for assets: (1) Cost is normally an expression of market forces and so provides an impersonal valuation of assets in contrast to the possibly whimsical and personal results if management had the power to set the figure; (2) in those cases

[3] Notable exceptions to this form are the statements of railroads and most public utilities. Usually subject to the uniform accounting requirements of their respective regulatory bodies, these businesses list their long-term assets and liabilities first and their short-term items last. The justification for this exists in the relative insignificance of the current items as related to the fixed in the operations of such businesses.

in which assets advance in market value after purchase, it would be improper to show such an increase on the grounds that no profit should be shown until it is realized by a completed transaction; and (3) the accountant is essentially interested in accounting for the business as a going concern, in which case current liquidation value is of little or no worth because there is no intent to liquidate. Those familiar with the laborious detail in accounting record keeping will also appreciate the practical value of the relative simplification which the cost principle brings to that task.

2. *Modification of cost to allow for asset depreciation.* Where assets, especially long-lived assets like machines or buildings, gradually lose their value over the years through wearing out or obsolescence, periodic reductions in value are made for this depreciation. Where an asset like a mine or an oil well is exhausted by extraction, a similar allowance is made for depletion. In order to preserve the original cost figure on the books, the allowances for depreciation are accumulated in a separate account, usually called "reserve for depreciation." In the balance sheet the two amounts will appear on the asset side, thus: [4]

Plant and equipment	$75,000	
Less reserve for depreciation . . .	15,000	
		$60,000

It is essential to remember that this "reserve" is in reality a "write-down" figure or offset to the cost, rather than a fund of cash, as might seem logical were one to use the term reserve in its popular sense. Because this so-called "reserve" is merely an allowance for loss of value, it would be far clearer to the nonaccountant to label it "allowance for depreciation." The word "allowance" would suggest the estimated character of the depreciation. And in so doing, it would help also to establish the fact that the net balance after the deduction is not intended to reflect current or market value of the asset as of the balance-sheet date. The effect is merely to show what part of the original cost of the asset has already been charged to operating expense by that time and what part remains to be so allocated.

3. *Modification of cost for current assets when market is lower.* That "conservatism" and business expediency are important explanations of the cost rule is suggested by the manner of its application to current assets. Here the rule becomes the lower of cost or market value. Actually, this substantial modification affects only the Inventories and Marketable

[4] Again practice in the utility field usually differs. There the depreciation figure will be shown on the liability side rather than subtracted from the particular asset.

Securities when on the balance-sheet date the market value has fallen below cost. (Where securities are held for control or permanent investment, the original cost rule is generally followed as for other fixed assets.)

The common explanation for this breach with the cost rule is that current assets are constantly being turned into cash by operations and their debt-paying value would be exaggerated by an adherence to cost. The adoption of the rule, however, has the effect of making the business anticipate its losses from the market depreciation of inventory at the end of each year but postpone any profit from market appreciation till it is actually realized by sale. So embedded in trade custom has this rule become that it is accepted by the income tax authorities in the computation of taxable income.

It would be beyond the scope of a finance text to delve into the complications of accounting technique that govern the detailed application of this rule. And yet differences in application may create differences in results that should make one careful in using comparisons, especially those of profit performance, between apparently similar businesses.[5] This is why it is necessary to elaborate upon one cost method which has had some acceptance in recent years and which can greatly modify the significance of both the balance-sheet figures for inventory and the profit and loss statement of earnings.

Probably the most common method of determining the cost of an inventory has been to assume that as units were sold or used, the oldest purchases were the ones used. Under this system, which the accountant calls "first-in, first-out" (sometimes abbreviated to FIFO), a fabricator who bought a first lot of copper at 16 cents and later amounts at 17 cents would show withdrawals from the first lot in his accounts until it was used up. The inventory accounts would show the balance on hand as consisting of the last purchases at any given time and would tend to show a "cost" for what is left that is constantly moving toward the current market figure. Except in times of violent price change, FIFO will give a balance-sheet inventory not far from current market values.

In contrast to this method of arriving at cost, recent years have seen the rise of a method known as "last-in, first-out," or LIFO. Instead of

[5] For example, cost or market valuation may be applied on an individual product, or a product group, or an over-all business basis. In the Accounting and Research Bulletin 29, *Inventory Pricing,* prepared by the Committee on Accounting Procedure of the American Institute of Accountants, statement 7 reads: "Depending on the character and composition of the inventory, the rule of cost or market, whichever is lower, may be properly applied either directly to each item or to the total of the inventory (or, in some cases, to the total of the components of each major category). . . . The method should be that which most clearly reflects periodic income." See the *Journal of Accountancy,* Vol. 84, No. 3, September, 1947, pp. 196–201.

assuming that costs of the goods sold are best represented by the prices of the earliest purchases, the opposite is followed whereby costs are based on recent prices and inventory value is governed by the prices of the earliest purchases. Financial differences between the two methods are important during and after periods of considerable price change. At the beginning of the Second World War some concerns decided that the prospects of inflation and the recently given permission to use LIFO for Federal income tax purposes made adoption of this newer accounting procedure desirable.[6] As prices rose in the following years, new purchases represented higher and higher costs. These latest purchases were charged into the costs of goods being manufactured or traded while the backlog of old inventory bought at lower prices was retained on the books and appeared as the "inventory at cost" in the year-end balance sheet. The financial effects of this practice will be traced more fully later, but its chief results are to show the asset inventory at much less than current market as prices rise year after year and, by charging the highest cost inventory into the profit and loss, to reduce the profit as compared with what it would have been under FIFO. Such conservatism was particularly useful during the Second World War (1941–1945) and even more immediately after (1945–1948) when inflation was in process.[7]

At this point, it is necessary only to note how important a knowledge of this variation of accounting practice is if meaningful interpretation is to be given the financial statements. Through this practice, the balance sheet can show an inventory figure widely variant from current market value, and two concerns that use different accounting methods may show greatly different profit results in a year of big price changes without the difference meaning anything necessarily with respect to comparative operating strength.

The *Accounts Receivable* typically rate as a major current asset along with the inventories for many businesses. They also need to reflect possible loss of value through uncollectible items. In a manner similar to the reserve for depreciation for machinery and buildings, a reserve, or allowance, for bad debts is set up and treated as a deduction from the amount of the Accounts Receivable in the balance sheet. In this way, a

[6] It is important to note, however, that if LIFO is used for Federal income tax purposes, the lower of cost or market rule is not permitted. Also, once adopted it must be adhered to thereafter without change.

[7] Since the LIFO procedure would be the opposite of conservative during a period of falling prices, it would not be adopted when the outlook for prices was bearish. A survey of practice shows that in spite of the opportunity offered during the early 1940's to lower reported profits and income taxes, most concerns, uncertain of the future, elected not to adopt LIFO. J. Keith Butters, "Management Considerations on LIFO," *Harvard Business Review*, Vol. 27, May, 1949, pp. 308–329.

net figure can be stated which represents the probable realizable value even though the specific accounts which will become worthless are unknown.

While discussing the Accounts Receivable, it is useful to note that from our point of view, namely, that of financial analysis, an important difference exists between that asset and others in the balance sheet. The amount of a customer's account does not represent "cost" or a money outlay. It is, instead, a claim acquired from the sale of goods or services, usually for more than the direct money outlays.[8] That gain, if any, is regarded not as an arbitrary inflation of the assets but as recognition that completion of the sale marked by delivery of the goods is the conventional point for recognizing profit even if the sale is made on credit rather than for cash. Viewing the transaction as a whole, it may be stated as follows:

Sale resulting in an asset—accounts receivable	$1,000
Cost of goods sold	700
Gross gain	$ 300
Expenses of operation and taxes	200
Net gain	$ 100

If the transaction is thought of in balance-sheet terms, clearly cash outlays for expense are as significant as those for merchandise and the asset changes can be pictured thus:

Assets consumed:	
Inventories	$ 700
Cash (for expenses and taxes)	200
Total consumed	$ 900
Assets acquired:	
Accounts receivable	$1,000
Net gain in assets resulting in increase in net worth of business	$ 100

This analysis might seem to show a logical reversal of our common thinking of balance-sheet assets as a use of funds and the liability side as

[8] Perhaps an exception ought to be made for the economic philosopher who might argue that ordinary and normal sales are merely exchanges of goods and services for an *equal* money claim. The services would include the money outlays for rendering the service as well as the cost of any merchandise and would include the cost of the capital used, which would, in turn, include what we term "profit" on equity capital. In business, however, the profit is regarded and recorded as a *gain* in the value of the equity interest.

sources of funds. The $100 profit element might be thought of as the source of the $100 increase in the owners' net worth. But in a strict sense it is better to think of the net worth as being the source, or explanation, of the $100 profit element which is initially "used" or tied up in the Accounts Receivable until collection is made. After collection the $100 of cash will be available either for use in other assets or for withdrawal by the owners. The point important for our later study is that so long as the business has Accounts Receivable (*i.e.,* sells on credit), it will have a *need* for funds *equal to the profit* as well as the cash outlays, either in the form of net worth, including profits of the owners left in the business, or else from financing in the form of liabilities. In other words, sources of funds must allow for the profit element contained in Accounts Receivable expansion just as for the cost element incurred in realizing the revenue. The difference lies in the fact that a business can finance this particular amount automatically by leaving the profit in the business instead of actively seeking additional credit or owner financing.

Asset Classification. This discussion of the peculiar nature of the customers' receivables completes our brief review of the principles of asset valuation. Two other matters of asset terminology common to both accounting and financial writing should be reviewed as necessary for our work even though not often found in the balance sheet itself. The first is the distinction between operating and nonoperating assets and the second that between tangible and intangible assets.

Probably most businesses will use all, or substantially all, their funds for normal operations. Occasionally a concern will have sums invested in stocks and bonds of other concerns, real estate not required in the business, or loans to officers and employees. Sometimes, too, a business, especially a large corporation, will have a substantial nonoperating investment of this sort and will derive important nonoperating income from it. Any analysis of finances will distinguish and treat separately such items when they are of more than nominal amount because they bear heavily upon the interpretation given to profitability. In judging whether or not an asset should be classed as operating a good test to follow is whether its use contributes to the regular operating revenues or to the nonoperating revenues. If the latter, then the asset must be looked upon as nonoperating. One notable exception to this rule exists, however. Marketable securities carried as a current asset should be looked upon as operating even though their income is of the nonoperating kind. Such funds are invested not for income purposes but rather for the sake of preserving liquidity, and they thereby constitute an operating cash equivalent.

When a corporation repurchases some of its stock shares, it may choose to show their amount among the assets like an investment under the

heading Treasury Stock. Because so many funds are no longer available for the purposes of the business, however, the Treasury Stock item should be removed from among the asset values by the cost of acquisition and deducted from the net worth section to indicate the actual residual amount of funds which the owners have left in the business. In other words, it is neither an operating nor a nonoperating asset but a net worth offset.

Lawyers and tax authorities usually employ the term "intangibles" in the popular sense to cover property rights, such as securities, notes, and other claims against persons, that lack physical substance. In finance and accounting, however, these claims are classed as tangible assets, and the term intangible is limited to three chief items, good will, patents, and organization expense, with occasionally some item of an allied nature. Valuation of these intangible assets follows the rule of cost. A business may buy the assets of another for more than the value of the individual assets because of their potential contribution to earning power. The excess payment may be shown as an asset, Good Will, although some concerns write it off at once or carry it at $1. Again a concern may purchase patent rights from another or spend money to develop them, setting up an asset account for the outlay. When a corporation is being organized it may spend certain sums, as for legal fees, which it will set up as Organization Expenses.

When these intangible assets are found in the balance sheet, the accepted practice is to eliminate them, partly for reasons of conservatism and partly so as to make figures comparable with those of the majority of concerns which exclude such assets even though they may own intangibles which would command a substantial price in the event of a sale of the business. This elimination of intangible assets from a balance sheet before comparative analysis reduces the apparent assets and the amount of the owners' net worth. Where this practice of elimination is followed, the phrase "tangible net worth" may be applied to the resulting figure for owners' equity to distinguish it from the book Net Worth shown in the published balance sheet and including value for intangibles.

The appearance of Discount on Debt occurs frequently enough in the asset column to warrant mention. Bonds and promissory notes are often sold at less than their face value. Such a discount offers to provide additional return to the holder above the interest income. Conventional accounting shows the full face value of the debt among the liabilities and puts the Bond Discount or Discount on Notes among the assets, sometimes under the general heading of Deferred Charges. Some specialists have argued for the classification of this item under intangible assets and then for the elimination treatment outlined above. Actually, the bonds or notes

have been a source of funds only for their paid-in value, which is their face value *minus* this discount. Consequently, if its amount is substantial enough to make such discount worth attention, the logical treatment would be as an offset to the liability account and deduction from that account in preparation of the balance sheet for financial study. As with the Treasury Stock item the discount is in reality not an asset of any sort.

Liabilities. Little need be said about the accounting for liabilities. In every case they represent outsiders' claims against the assets arising out of past financing of those asset requirements. These financing methods exist in the form of direct contribution of funds, as with a bank loan, and deferred payment on services rendered, as with accrued wages, accrued taxes, accounts payable, etc. The *current* liabilities include such debts as mature within one year or less. They usually are in the form of Accounts Payable, Notes Payable, and accrued items. It is not unusual, also, for notes which originally had a distant maturity date to be grouped with the current liabilities when the settlement on the note is to be made in the current year.

The fixed liabilities are likely to consist of Mortgages Payable, Notes Payable (over one year), or Bonds Payable. When Loans Payable are made by partners, however, they should be clearly distinguished as such, since they are not a part of creditors' claims but merely express a priority as among the partners in the division of the owners' share of the assets.

Net Worth Accounts. The excess of property, or assets, over the indebtedness, or liabilities, constitutes the share or claim of the owners and is customarily called the net worth. A more generalized term that is often used in this connection is "owners' equity." In the sole proprietorship, it will appear as a single account, thus:

James Dickinson, capital	$12,000

When a partnership exists the Net Worth accounts in the balance sheet will show the respective amounts of the partners' shares of the ownership equity or claim, thus:

James Dickinson, capital	$12,000	
Frederick Marks, capital	15,000	
Total net worth		$27,000

If a corporation is formed, as by the above partners, they might issue themselves shares of stock of $100 par value for their respective interests and the Net Worth section would show

Capital stock (par $100)	$27,000

If, however, they decided to use stock without par value, they would find it necessary to adopt an arbitrary stated value (not less than the minimum figure per share permitted by law) for their balance sheet. This stated value then appears in the accounts as Capital Stock, and the difference is recorded as Paid-in Surplus. Thus, if in the preceding case the same 270 shares were issued without par but at a stated value of $5 per share, the balance sheet would have shown

Capital stock (stated value $5 per share) [a]	$ 1,350
Paid-in surplus	25,650

[a] 270 shares of stock without par value.

A similar balance-sheet result would have been achieved if, instead of stock without par value, shares with a low or "nominal" par had been issued. Thus, if a par value of $5 had been adopted the Capital Stock would have been but $1,350, and the excess of the founders' capital contribution would have appeared as Paid-in Surplus.

If, for reasons that were discussed in Chapter 2, variation in type of ownership interest is desired, the Capital Stock section would have to summarize the separate instruments used, thus:

Capital stock:		
Preferred ($100 par, 6% 100 shares)	$10,000	
Common ($100 par, 170 shares)	17,000	
Total		$27,000

If the preferred is sold on a no-par basis, its treatment would be the same as illustrated above for the no-par common. If, after starting business, the stockholders' net worth grows as a result of profitable operation, the increases will be kept under a separate account (unlike the partnership) called Earned Surplus. Should losses rather than profits occur, an account called Profit and Loss Deficit would appear and be treated as a deduction from the sum of the Capital Stock and Paid-in Surplus to arrive at the amount of the stockholders' balance-sheet equity.

If there is only one class of stock outstanding, the *book value* (net asset value) of each share can be found by dividing the total value of the ownership accounts by the number of shares of stock outstanding. If more than one class of stock exists, calculation of book value per share is still possible but care must be exercised to allow for the proper allocation of the total net worth value among the separate groups' claims.

Accruals and Deferred Items. For practical reasons of economy the accounting records do not reflect the ebb and flow of value in all items from day to day but merely record for memoranda purposes the specific

cash transactions as they occur. For certain items of expense and income, however, cash settlement may still lie in the future at the time when drawing up of the formal statements is required. For example, the business may own some government bonds upon which interest has been accumulating, or accruing, for a few weeks or months. The accrued interest is an asset which would be realized if the bonds were sold. So at the year's end the accountant calculates the amount earned and sets it up as an asset, Accrued Interest Income. The result is an increase in the current assets and the net worth by the amount of this item. A more accurate balance sheet results from this more exact accounting.

Similarly, the expense for taxes may be accumulating although no tax bill may be rendered for a number of months afterward. So at the end of the accounting period the liability Accrued Taxes is set up. The result is an increase in liabilities and expenses (decrease in net worth) over what simple cash accounting would show.

Whereas the cash transaction lies in the future in the case of accruals, it lies in the past in the case of deferred items. For example, cash may have been paid for insurance policies during the year. Such a payment would be regarded as an expense under straight cash accounting, but a review at the end of the period would show a portion of the life of the policy unexpired. In more exacting accounting, therefore, the prorated portion of the premium which is unexpired is set up as an asset and the expense is deferred to a later period.

Probably because these Deferred Expenses (or Deferred Charges or Prepaid Expenses) are a doubtful source of cash in liquidation, the practice is to show them under a separate heading. From the financial point of view of a *going* business, however, those items which are prepaid expenses, like the insurance premium in the example given, are a support to cash and the equivalent of current assets in meeting the near-term needs of operation. Since the Deferred Expense heading may include some items that will be charged to expense over a period of more than one year as well as other items of rather specialized character (*e.g.*, Bond Discount), it is usually desirable to treat them as a special class of asset between current and fixed. Ordinarily, these items are of minor balance-sheet importance save as they indicate careful accounting practice. If they should be large in value, however, special analysis of their individual character is desirable in order to classify them in a way that will recognize their essential financial bearing on the given situation.

Deferred Income is set up on the liability side at the end of the period when a business has received cash from a customer who has not yet received the goods or services paid for. Examples of such a situation would exist where a magazine publishing company has collected for subscrip-

tions in advance, where an insurance company has received premiums in advance, and where a real-estate company has prepaid rental income from tenants. The business has not yet delivered value for the money received and has a liability to the customer. To the extent that the liability must be met within one year and will create a drain on current assets, it is of the same nature as a current liability. For two reasons, however, both important in financial control, it is customary to distinguish Deferred Income from the current liabilities and place it in a distinct category immediately below the latter in the balance sheet. In the first place, the drain on current assets will often be less than the amount of this liability because a profit element is expected; second, instead of the cash, which is typically needed to liquidate current debt, the business may meet the deferred income liability by the delivery of inventory, that is, by utilizing an asset other than cash.

It may be noted that the practice of setting up deferred items does not keep the given expense or income from registering its effect upon net worth but merely transfers that effect to a later period. A small business which kept its records on a cash basis would have a seriously misleading balance sheet only when these items were substantial. Typically the items are more important from a percentage point of view in the profit and loss statement than in the balance sheet. Even there no substantial error will result unless the amount of the accrued or deferred items changes considerably between the beginning and the end of the period. Because certainty as to accuracy is desirable, however, practically all businesses, save smaller units in the personal service field, generally employ the accrual basis of accounting. Even these exceptions will often find it advantageous to calculate the accruals as of the end of each year in order to construct accurate balance sheets and more accurately measure their financial progress.

Reserves

Up to this point the subject of accounting reserves in the balance sheet has been avoided except for the asset valuation type. So different is the accounting usage from the popular meaning of reserve, namely, a fund set aside for some special purpose or emergency, that we should seek new terms were not the accounting practice so well established. The accountant uses reserve to cover three types of balance-sheet items, (1) allowances for the decrease in value of certain assets, (2) estimated liabilities, and (3) appropriations of net worth so as to show it as "reserved" for some named purpose.

The first of these, the *valuation reserve,* is one which provides for the accrued loss in the value of some asset. A reserve for depreciation, re-

serve for bad debts, and reserve for inventory write down are examples. In each of these cases the asset is given a reduced book valuation, shown not directly in the asset account but by setting up an offsetting valuation reserve account. Since the anticipated loss is at best a reasonable estimate, it is useful to show the allowance for lost value in a separate figure. For financial analysis it is important to know both the amount originally invested in the asset and the portion that has been recovered out of past revenues. And since this recovery does not usually remain in cash form, the term Allowance for Depreciation is sometimes recommended in place of Reserve.

Liability reserves are set up to show various kinds of liabilities that have arisen and in so doing to provide for their coverage out of current income. Examples are Reserve for Income Tax and Reserve for Pension Payments. A reason sometimes advanced for this use of the word reserve is that the liability is but estimated. In such cases the title Estimated Income Tax Liability would be more revealing of the nature of the item to those not versed in the phraseology of the accountant. Sometimes, as in the case of the reserve liability of insurance companies to their policyholders for unearned premiums, the amount is as precise as any accrual and in any other business would be classified as Deferred Income (see above).

Surplus reserves exist when a part of the owners' equity or net worth is shown as a special claim. Such reserves fall into two subclasses, (1) the clear-cut surplus reserve, which merely shows that so much of the net worth is not to be regarded as available for withdrawal, and (2) the contingency reserve set up for possible future loss.

The first type is most usually found in the balance sheet of corporations whose stock is owned by the general investor public rather than the owner-managers. Examples of this type of reserve are Reserve for Working Capital, Reserve for Plant Expansion, Sinking Fund Reserve, and Reserve for the Retirement of Preferred Stock. In none of these cases is the owner of the business less well off because of the separation of such amounts from the general Earned Surplus. Sometimes they are even labeled as Appropriated Surplus. The reserve label merely serves as a "hands-off" sign and indicates that so much earned surplus will not be available as a basis for dividends to stockholders. Until the label is removed, it expresses the determination of management that so much of retained earnings is to be regarded as permanently invested. Most corporations do not bother to employ this surplus reserve label but simply leave the retained earnings under the Surplus account. They expect the informed reader to study the assets and to note the full employment of the owners' investment including such Surplus. In the absence of extra cash,

the stockholder is expected to realize that special cash dividends are not paid on the basis of Surplus alone. Clearly, when found such surplus reserves should be included in arriving at the total net worth to obtain the book value of the owners' investment.

The contingency reserve may be simply labeled as such with no indication of the specific trouble or loss which it is expected to care for, or the nature of contingency may be stated in the account as Reserve for Inventory Price Fluctuations, Reserve for Damage Suit Claims, or Reserve for Losses under Self-insurance. To the extent that a prospective loss is known, the reserve would cease to be a contingency reserve and would constitute an accrual, even though the loss because of its prospective nature, might not be deductible for income tax purposes. A metropolitan street car and bus company whose damage claims are continuous and susceptible of fairly accurate measurement would regard its Reserve for Claims as a liability rather than a contingency reserve. On the other hand, the outcome of a suit for damages under a patent infringement case might be unpredictable.

Since the loss to be covered by such a reserve is only a future contingency, it could be argued that liquidation of the business at the time of the balance sheet would in most cases eliminate the potential loss. This reasoning alone would justify treatment of the contingency reserve as a part of net worth. For example, if a business had set up a Reserve for Inventory Price Fluctuations during a period of inflated prices, it would by liquidation shut off the hazard of that loss impinging upon the owners' equity in the assets. Similarly, a business that elected to bear some of its risks rather than take out insurance might set up a reserve equal to the saved premiums, calling it a Reserve for Self-insurance. If no losses had occurred up to the time of the balance sheet, it should be clear that from a liquidation point of view the amount is not a liability or an asset but a part of the net worth.

It has been pointed out, however, that a business does not contemplate liquidation in the ordinary course of affairs but expects to continue as a going concern. Pursuing the going-concern assumption, one could then argue that the contingency reserve represents the best estimate management is able to make of troubles and losses that lie ahead. Because of the rule that financial statements must be prepared at least once per year rather than for long periods during which these irregular losses might spread themselves out more smoothly, management may feel it necessary to estimate these contingencies lest the balance-sheet and earnings statement engender excessive optimism in the years when trouble is rare and undue pessimism when the blows fall thickly.

If the final assumption is made that management is better able to judge these contingencies than an outsider, it becomes logical to shift from what might be called a liquidation to a going-concern theory and treat contingency reserves like accrued liabilities rather than surplus. In the absence of any knowledge of impending liquidation, most persons will probably prefer to adopt this approach in calculating the owners' net worth, but adding a careful qualifying note as to the amount of potential surplus which could result should the envisioned liabilities or losses prove imaginary rather than real. Because the practice of building up large and vague contingency reserves in recent years as a means of holding down the size of profits available for dividends has become very popular, however, most financial specialists have become very suspicious of the liability character of these reserves and have chosen to treat them as part of Net Worth unless there is some fairly clear evidence to support the other position.

This increased importance of contingency reserves during the uncertain transition years following the Second World War gives meaning to the common dictum of the public accountant that "a balance sheet is a statement of opinion and not a statement of fact" even when prepared with the most scrupulous regard for accounting conventions and skillful business judgment. The thoughtful reader will also observe with interest the "contingency" element in the valuation reserve for a long-lived asset where final retirement is likely to result from obsolescence contingent upon technological development rather than ordinary wear and tear. A similar contingency element might exist in a liability reserve for income taxes where the application of the law and regulations was uncertain.

Concluding Remarks. The preceding remarks on reserves would be valuable if they did nothing more than point up the need for knowing the operational meaning of accounts. In order to classify and use accounting information effectively, it is necessary that the analyst go behind the name of the account and be sure he appreciates the operational fact to which it relates. Sound interpretation is based not only upon a knowledge of general rules with respect to the treatment of standard accounts but also upon an appreciation of the specific operational realities of the individual business. A constant danger in the formal analysis of financial statements is that too much attention will be given to standard forms and not enough to their reasons and limitations.

In support of this statement we might well quote from a widely recognized authority in the field of accounting and finance: [9] "A preliminary point that should be directed to your attention is that those who use the

[9] Statement of W. A. Paton before the Presidential Steel Board, August, 1949, as printed in the *Journal of Accountancy,* October, 1949, p. 344.

data of corporate accounting should be aware of the limitations inherent in conventional accounting determinations and should not undertake to make use of these data for purposes for which they are not suitable."

Another point that should be mentioned before proceeding to the matter of interpreting and using balance-sheet data relates to mechanical reliability. The balance sheet, in showing the financial position of a going business, is a formal, condensed presentation of the "real" accounts in the ledger. To the extent that the information is condensed in form, clarity and understanding are sacrificed. Some condensation is of course required by practical considerations, but in some cases it may be carried to extremes. Supporting schedules and footnotes are often useful for securing more precise information. And in certain cases special reports to regulatory bodies or prospectuses in support of security flotations may be obtainable. If the analyst is in a sufficiently strong bargaining position, as sometimes holds for short-term creditors of a small business venture, he may even demand access to the detailed information of the ledger.

In utilizing the balance sheet it should also be remembered that it is subject to continuous change from the flow of business transactions. One must ask how far this element of change affects the practical usefulness of a given statement. For some static businesses, a balance sheet may continue to be fairly representative of conditions for a considerable period. For others, the balance sheet might be out of date within a month after its construction. Where the situation warrants, the cost and difficulty of numerous reviews may be less important than the value of the more current information on financial condition provided thereby.

Questions

1. What is a balance sheet? What are assets? Liabilities?
2. What is the meaning of financial position?
3. From where is the balance-sheet information obtained? Be thorough in your explanation.
4. Why does the balance sheet balance?
5. Upon what are the balance-sheet values based?
6. What is the ideal desired with respect to the information contained in the balance sheet? Why is this ideal not achieved?
7. What is the justification for valuing current assets at the lower of cost or market and thus breaking with the historical cost principle?
8. "LIFO inventory costing is not an alternative to the lower of cost or market principle except for Federal income tax purposes." Explain.
9. Illustrate how the profit records and financial positions of two identical companies could vary widely during periods of serious price

changes just by virtue of following different inventory costing methods.

10. What is a reserve? How is it established? What is its purpose?
11. What is net worth? How is per share book value of common stock calculated?
12. What is surplus? What types are there?
13. Why may assets be classified as current and fixed, operating and nonoperating, tangible and intangible for analytical purposes?
14. What do deferred and accrued items on the balance sheet represent?

Chapter 4. THE FORM AND CHARACTER OF PROFIT AND LOSS STATEMENT INFORMATION

The purpose of this chapter will be to review the general form and character of the profit and loss statement information and to note in particular those points which are significant in using it for financial purposes. It will be recalled that in the beginning of the preceding chapter, where general introductory remarks were made as to the nature of financial statements and their uses, the profit and loss statement was described as a summary of changes in the owners' claim or equity resulting from operations over a given period of time. It was explained that the need for this existed because of having to know the profitability of a concern in order to be able to judge effectively its over-all financial strength and stamina.

Relationship to the Balance Sheet

Since balance-sheet information is restricted to the financial facts existing at a single point of time, it clearly is inappropriate for measuring change or judging operational strength. Every business transaction immediately and directly changes the existing balance sheet, it is true; but providing a running account of the changes to a business's financial condition, though possible and valuable, is impractical. The standard procedure is to take periodic snapshots of the financial condition. This alone is deficient, however, for a single net change shown between two balance-sheet dates has generally resulted from a number of different intervening transactions. In order to be most informed as to the various factors bearing upon the change and thereby to have the means to judge and control the business effectively, the detailed transactions must be recorded and later summarized in statement form.

To illustrate how the profit and loss statement is just such a formal summarization of changes in the surplus or capital accounts of a business, a few simple examples may be used. If rental income of $100 is received on a part of the business property that is leased out, cash and total assets are increased by the amount and so is net worth. If the public-utility bill of $25 is paid, cash and total assets are decreased together with net worth. If inventory carried at a value of $100 is sold for cash at $125, both total assets and net worth are increased by $25. Other cash expenses

besides the utility bill might be assumed, in which case the assets and net worth totals would again be decreased. The balance sheet could have been changed immediately to give effect to each of these transactions, but if many such individual changes are to occur over a period of time, it is far preferable to establish separate memoranda for subsequent summarization. Thereafter, income items, such as rent and sales, would be credited for the increases in net worth; and expense items, such as materials, electric power, and wages, would be debited for the decreases. The sum of the income items minus the sum of the expense items would show the *net* increase or decrease to net worth. And a listing of the individual items would provide a detailed explanation of the causes. The memorandum character of these income and expense items is borne out by the fact that they are "closed out" on each balance-sheet date.

To say that income and expense items are memoranda net worth accounts, however, is not sufficient. This merely states their ultimate effect and purpose; it does not lay emphasis upon their essential source. Net worth decreases through the operations of a business because of a resulting decrease in asset value.[1] When merchandise is sold, the cost of the goods given up is a charge against net worth. When wages are paid in cash, the amount by which the cash is decreased becomes an expense.

Similarly, net worth increases when through the operation of the business there results an increase in asset values. When goods are sold, asset value is increased by the amount of cash or receivables realized from the sale and this increase constitutes income. Income from rentals is nothing more than a figure showing the amount by which total asset value was increased by virtue of payment received for the use of property owned.

To give a positive definition to the terms income and expense, then, we may say that *income* is the amount by which asset value increases through the regular operations of the business and, conversely, *expense* is the amount by which asset value is decreased or consumed through these operations. Items of income—such as sales, fees, dividends, etc.—are merely names for the means by which asset value has been increased. And such expense items as wages, rent, depreciation, etc., are names to describe the way in which asset value has been dissipated. To be most explicit, we should say that the profit and loss accounts are memoranda accounts to permit recall of how asset value has been increased and

[1] All individual changes in asset value do not result in simultaneous changes in net worth. Some are involved in debt financing operations, as when a debt is paid off, or new funds are borrowed. The only net worth changes that bear upon the profitability of a business, what is more, are those which arise out of the regular operations of the business. The investing of additional funds by the owners would increase net worth, but by external application rather than internal appreciation.

decreased over time by way of the regular operations and the net effect of such upon the net worth of the business.

The relationship between the profit and loss statement and the balance sheet is established, therefore, on two scores. First, the purpose and effect of profit and loss information is to show in fairly detailed fashion how the operations changed the balance-sheet item Net Worth over a given period of time. Second, the items summarized in establishing the change are memoranda of the various means by which asset value was increased or decreased through the operations of the business.

Purpose and Value of Profit and Loss Information

On the basis of what has just been said the question naturally arises as to the use and interpretation of the profit and loss information. Reference was made earlier about the importance of such data. To judge a business effectively as a going concern, adequate knowledge must be had of its profit-making potential. From a strictly financial standpoint, the purpose of private business operation is to make a profit. In order to direct operations effectively to achieve this end, management must have detailed knowledge of past performance. Furthermore, potential long-term investors are primarily interested in the growth opportunities, the profit prospects, and the vitality of a business as portrayed by past profit records. And even short-term creditors, as will later be shown, are concerned with the profit and loss information as it bears upon cash-generating ability and thereby solvency. Such creditors also realize that there are certain ties between solvency and profitability in the long run. Finally, diverse groups such as labor organizations and governmental bodies might from time to time have keen interest in the profitability of a single business or whole groups of businesses.

The Problem of Determining Periodic Profitability: Principal vs. Profit

The central problem in accounting for the profitability of a business is to differentiate clearly in all transactions between principal and profit.[2] In any investment the intent is to preserve the initial principal placed at risk while realizing a maximum return from its use. And so in any business endeavor the objective is to recover out of current revenue the cost of the assets consumed in the process of generating the revenue and have a sufficient excess income remaining. It matters not whether the income is

[2] In some writings it is referred to as differentiating between "capital" and "income." Because of the different connotations commonly associated with these two terms, the present authors favor "principal" and "profit" as being more explicit for the particular purpose.

realized in periodic or lump-sum payment, the objective is the same; the accounting for it, however, may be quite different, as will be shown later.

A profit and loss statement, therefore, ostensibly shows what the net return upon principal invested has been over a given period of time. That is its whole purpose, and its success or failure in this regard will depend upon the accuracy that has been achieved in differentiating between principal and profit in the accounts. Management decisions, investor reactions, labor-union claims, and even public policy will all be based implicitly upon the assumption that the profit and loss statement portrays profitability in this exact sense. To the extent that the assumption is not well founded all users of the statement will be misled.

The problem involved might well be illustrated by a few cases. A set of merchandise that originally cost $100 is sold for $150, but in order to replenish the stock, the seller has to put out $120. Is the profit therefrom $50 or $30? Or to place it in the opposite light, is the principal investment $100 or $120? For another, equipment costing $1,000 is to be used by a business for a period of five years. If a profit figure is desired at the end of the first or second year it is in use, then what should be its value as of that time? What part of gross revenue has been return of principal and what part clear profit? By the end of the third year the replacement value of the equipment is $1,500. Should the annual depreciation charge against income be $200 or $300? Or, phrased differently, is the value of the original principal $1,000 or $1,500? Finally, suppose goods are sold on account rather than for cash at a price of $500, which includes a markup of 20 per cent. Is there an immediate profit realized of $100? Should principal be considered fully recovered when merchandise value is converted into a receivable?

Probably the best example to use to illustrate how the accountant attempts to differentiate between principal and profit is the provision for depreciation of fixed assets. Let us assume, as a basis for discussion, the following very simplified case:

X Corporation

Balance Sheet, December 31, 1950

Assets			*Liabilities and Net Worth*	
Current		$20,000	Current	$ 8,000
Fixed	$40,000		Fixed	10,000
Less reserves for depreciation	10,000	30,000	Net worth	37,000
Miscellaneous		5,000		
Total		$55,000	Total	$55,000

X Corporation

Statement of Profit and Loss, Year Ending December 31, 1950

Sales		$100,000
Cost of goods sold		50,000
Gross profit		$ 50,000
Operating expenses	$21,000	
Depreciation	4,000	25,000
Net operating income		$ 25,000
Nonoperating expenses		5,000
Net profit		$ 20,000

The depreciation allowance of $4,000 is based upon the straight-line method with a life expectancy of 10 years. In other words, in attempting to calculate on an annual basis the amount of net profit realized the accountant has determined that $\frac{1}{10}$ of the original cost of the fixed assets should be treated as the portion consumed annually in operating the business and therefore the amount that has to be recovered out of gross revenue before any profit can be assumed. The original principal is thereby protected even though it may change in form. If identical operating results are assumed for the next 3 years, all profits are withdrawn by the owners, and no changes are made in financing methods, the balance sheet at the end of the time will appear as follows:

X Corporation

Balance Sheet, December 31, 1953

Assets			*Liabilities and Net Worth*	
Current		$32,000	Current	$ 8,000
Fixed	$40,000		Fixed	10,000
Less reserves for depreciation	22,000	18,000	Net worth	37,000
Miscellaneous		5,000		
Total		$55,000	Total	$55,000

The total funds invested in the business have remained constant, but value in the fixed assets has been converted to the current to the extent of the full depreciation. The reason for this is that, by being a noncash charge against operating income in determining net profit, the depreciation allowance has had the effect of keeping liquid resources in the

business which might otherwise have been distributed to the owners in the form of profits. This may be explained as follows: Net Operating Income exclusive of depreciation in the above case is $29,000. This income, what is more, has been represented in the form of cash and receivables when the sales were made. Now if cash is paid out to the extent of $5,000 for nonoperating charges, there remains in the form of cash or receivables a net increase of $24,000. If $4,000 of this is retained in the business as a recovery of the amount presumed to have been lost in the fixed assets, then only $20,000 can be used as profit and the $4,000 remains for the time being as a definite increase in liquid assets.

This conversion of asset value from fixed to current is why it is common in financial circles to refer to the depreciation charge as a source of funds. Actually it is not a source in itself: operations are the source of the funds, but the depreciation allowance provides a retention of such funds to the amount of its value. These retained funds might, in turn, be used for expanding the operating assets of the business or retiring outstanding indebtedness. In the above case, for example, instead of showing the current assets building up to $32,000, a more realistic example would have been to show the fixed debt being paid off so that the total investment would have been reduced to $45,000 and the current assets increased to but $22,000.

Also, we can see in what sense financial specialists refer to an inadequate allowance for depreciation as contributing to the "automatic liquidation of the business." If the full $24,000 net increase in liquid assets had been withdrawn as profits, while the $4,000 would have been a reasonable depreciation allowance, the owners would, in fact, have been receiving in the form of dividends a partial return of their original principal investment. The fixed asset investment would have been gradually dissipated through withdrawals by the owners.

Clearly the noncash charge, depreciation, is one of the best cases of an attempt by the accountant to differentiate between principal and profit in calculating period profit. Contrary to popular belief, the fundamental purpose of the charge is not to state more accurately the present value of the asset; nor is it primarily aimed at replacing the asset, though it may contribute to this. Its essential purpose is to provide for gradual recovery of the value contained in the fixed assets so that the total dollar principal might be preserved intact, regardless of its form.

In order to calculate profit, then, it first becomes necessary to determine the principal that has to be recovered out of income. Since most assets are in noncash form at the time of profit determination, the problem is greater than would appear on the surface: some method must be adopted for expressing the principal value of these noncash assets. Three possible al-

ternatives for accomplishing this end do, in fact, exist. They are commonly known as "liquidation value," "historical cost value," and "replacement value."

Under the liquidation value process the value of all noncash assets would be converted to that cash value which could be realized from their immediate sale or liquidation in the market. (The term implies a "piecemeal" sale or "breakup" value.) The advantage of this method is that it would attempt to rely upon the objectivity of market expression and would thereby seem to offer a greater precision to its final results. The disadvantages, however, are much more significant. Even the semblance of precision is misleading, for the calculation of liquidation value cannot take into account the depressing effect that forced liquidation of the various properties would undoubtedly have upon market price. In many cases, too, as with specialized plant and equipment, there is no established market for the item, and any statement of liquidation value would of necessity be highly presumptuous.

The major disadvantage to the use of liquidation value, however, is that for the purpose of continued operation it is practically useless. With most concerns interested in calculating profit there is no intent to liquidate, and the presumed aggregate value in liquidation could have no relation to the long-run going-concern value of the total business.[3] The physical properties of a business administered by specially competent management might liquidate at a very low figure, but the total income that could be generated by these properties in operation over an extended period of time could still be adequate to recover all the original principal invested and leave a substantial profit in addition. The business is more valuable, therefore, when appraised as an operating organism (a going concern) rather than an idle machine. (Just as the human body from a purely chemical-content standpoint is worth practically nothing.) Liquidation value has meaning only in the case of (1) a whole business, the physical assets of which have to be sold because of cessation of operations for one reason or another, or (2) particular assets which have to be sold during the operations of the business.

The concept of a going-concern value as opposed to a liquidation value, on the other hand, offers a dilemma. To arrive at such a value in an absolute sense, there must be some initial presumption as to the profit-

[3] The term "going-concern value" has reference to the worth of a business as a continuing operating unit. It is useful in differentiating between the worth of a business as a regular generator of income and its value as just so much brick, mortar, wood, and machinery. The term is sometimes used in a more precise fashion with the valuation of public utilities for the purpose of rate making, but this merely constitutes a particular application of the over-all concept.

ability of the business since it in essence is the present value of the future flow of income. But determination of profitability is itself dependent upon prior establishment of principal value. There is a difference, in other words, between going-concern value and principal value, although the one is dependent upon the other.

The most generally accepted method of determining principal value in this going-concern sense is that of historical cost. By the term is meant the actual dollar value invested in the property at time of acquisition. Attention has already been given in the previous chapter to reasons for use of the cost basis in establishing balance-sheet values. In connection with measuring periodic profits, the reasoning that underlies its widespread acceptance is that the essential objective of the investor is to preserve the dollar value of his investment and any return over and above this amount is considered by him as clear profit. The reasons for special deviations from the historical-cost principle were also discussed in the preceding chapter and should be recalled at this time.

Many authorities argue, on the other hand, that in order to give real expression to going-concern value, principal should be viewed in physical rather than dollar terms. It matters not what money was originally committed to a business undertaking; the important thing is how much has to be eventually tied up in order to preserve the physical facilities and thereby the complete concern. On the basis of this reasoning, *replacement value* of the assets is advocated as the measure of principal. In a period of generally rising prices, provision should be made for the added dollar investment that will be required when assets are replaced. Although in theory the principle applies equally well in periods of declining prices, attention is focused upon it mainly during periods of rising prices when the tendency is to overstate profits and understate principal.

The more common applications of the theory of replacement value are in connection with depreciation and inventory valuation. With respect to the former, it has been proposed that the value of the depreciable asset as well as the periodic amount of depreciation be adjusted by application of appropriate index numbers. Thus, if prices of a particular type of equipment increase 20 per cent according to the index, both the asset itself and the annual depreciation charge will be increased accordingly. As for inventories, compensation for price fluctuations is inherent in the last-in, first-out (LIFO) method of costing explained in the last chapter. In fact, in recent years there has been some rather influential support to the idea of applying the last-in, first-out philosophy to the valuation of fixed assets. The actual application of this would have to rely upon some form of index-adjusting device as described above rather than depending upon rather automatic operation as with inventories. For the LIFO de-

vice to be strictly applicable there must be a relatively homogeneous group of items with a high rate of turnover. The idea but not the mechanics is applicable to fixed assets.

It is interesting to note in this connection that whereas LIFO in inventory costing has been well accepted in accounting and financial circles and is permitted under certain conditions by the Bureau of Internal Revenue in computing profits for tax purposes, compensating depreciation has not been similarly regarded. In a sense this may be contradictory. On the other hand, the rapid circulating nature of inventories as opposed to equipment and other fixed assets can be used as strong justification for the difference in treatment. Ideally, though, there would seem to be greater logic to consistency in treatment regardless of the philosophy chosen. This point will be discussed more fully in a little while.

Summarization of the points brought forth in the immediate discussion would show that the problems attached to calculating intermittent principal value for the purpose of measuring periodic profitability are essentially divided into three groups, (1) those which exist because of inability to determine accurately in advance the future life of a given asset, (2) those which exist because of inability to forecast accurately future price changes, and (3) those which exist because of inability to anticipate exactly final liquidation value. The problem of determining whether an expenditure of cash is really an operating expense (repairs) or a capital expenditure (improvement) is strictly one of knowing its contribution to the life of the fixed assets. To a major extent the problem of depreciation is also based upon the uncertainty of the life expectancy of the physical assets. Any number of cases are met with in business experience of equipment being used long after it was "written off on the books." Such cases simply evidence the fact that the periodic profits originally determined were actually understated, so far as this one item was concerned, because of the failure to foresee accurately the future useful life of the assets.

The whole dispute on whether to account for principal on a dollar or physical-asset basis is raised because of the constantly fluctuating nature of our price structure. The proposals for LIFO costing of inventory and compensating depreciation are offered as devices for coping with the problems created by such fluctuating prices. Even though life expectancy of an asset could be determined precisely, valuation problems would still exist because of constant and unpredictable changes in replacement value.

The problem of anticipating bad debt losses on receivables is the principal case of difficulty existing because of inability to anticipate final liquidation value. It is set apart from any consideration of life expectancy

or price changes. The realizable cash value of customer credits at any one time is uncertain, but not because of either of these contributing factors. To some extent the contingency of liquidation value also contributes to the problem of adequately allowing for depreciation. In nearly every case a fixed asset will have at the end of its useful life some "scrap value." To the extent that this is so, the periodic depreciation charges must take it into account along with the calculation of life expectancy.

Determination of "True" Profit

Since calculation of profit depends upon accounting for principal and principal value varies according to different individual objectives and beliefs, the question which naturally arises is whether there is such a thing as "true" profit. The apparent conclusion to be drawn from the preceding discussion is that no periodic accounting profit can be defended as absolutely true. As a matter of fact it can be said that true profit can only be determined by accounting for the net cash change in a business venture over its whole life span.

Thus, if $10,000 is invested in a new business which operates for 20 years and liquidates at $8,000, while $7,000 was withdrawn by the owners during the period of its life, then $5,000 represents true profit *for the 20-year period.* In keeping with our earlier definitions of income and expense, it is the net increase in cash value realized from operations.[4] Any attempt to determine the profitability of this business at the end of 1, 2, or 10 years, on the other hand, introduces the problem of establishing principal value as of those dates and therefore necessarily introduces a decided element of supposition.

To try to account for periodic profits, however, by adhering to a strictly cash basis would result in figures even further from the truth, since, as was pointed out in the previous chapter, some income is constantly being realized and expenses incurred even though there are no cash transactions to evidence the fact, and sometimes cash is received or paid out in advance of the actual realization of income or expense. For more meaningful profit accounting on a periodic basis it is preferable to allow for these noncash transactions in the accounts even though the process requires conjecture and speculation as to the facts.

[4] This concept of profit is different from the technical economic concept of profit and may be disputed as true on that score. Profit in the economic sense refers to the net increase in value that remains after allowing for a "normal" interest return on the total funds employed, assuming, of course, adequate allowance has been provided in the accounts for the costs of labor (wages). Profit as we use it here, therefore, refers to *total* return on principal employed. In order to convert it to the economic sense, all that needs to be done is to deduct an amount representing imputed interest.

Some financial writers would even disclaim that in accounting for the full life span of the business suggested above $5,000 represents true profit under all circumstances. The difference in viewpoint here, however, springs from a basic difference in agreement as to the essential purpose of accounting records. The critics would argue that profit should be expressed in "real income" terms rather than dollar terms; and so if prices had risen during the 20-year period by 100 per cent, it would mean that the business had actually realized a profit of only $1,000. The $8,000 liquidation value would be worth only $4,000 in terms of original dollars, representing a total loss in principal value over the 20 years of $6,000. This subtracted from the $7,000 withdrawn over the period of time would leave $1,000. Actually, if the $7,000 withdrawal is also reduced to original dollar terms according to the prices existing at the times at which it was acquired, then the profit might well be less or the results even constitute a loss.

The other, and more defensible, viewpoint is that, granted the purchasing power of the dollar has declined, accounting records should nonetheless be restricted to calculations in the standard unit of account and not be subjected to potential inaccuracies resulting from the use of some vague, probably variable, and always inexact "purchasing-power unit." The objective of accounting information, in other words, should be to measure dollar change and dollar conditions. It then becomes the responsibility of the user to interpret these dollar figures in the light of changed conditions over time.

In this sense the true profit in the above situation is 5,000 *dollars*, but the value of this is less than it would have been 20 years earlier. To adopt the contrary viewpoint and express the profit as $1,000 would be to clothe the concept in some sense of exactness and thereby contribute to greater confusion than if no adjustment had been made. The figure is still expressed in terms of dollars, but they are in fact different dollars from those with which the public is generally familiar—they are purchasing-power dollars and not ordinary dollars. The tendency, therefore, would be to compare the figure with current prices (and thereby cause it to be still further undervalued) rather than with prices 20 years earlier.

On the basis of this reasoning it would seem wisest to adopt the historical-cost and FIFO methods of costing in determining accounting profits and adhere to them consistently. Interpretation of the resulting profits for managerial and economic-analysis purposes could then be made accordingly. In the end, however, the manner of costing is not so important as consistency in treatment and *thorough recognition by the user of the particular methods used and their bearing upon the accounts.*

The Accounting Compromise

It should be clear at this point that the standard accounting profit figures appearing in year-end statements do not portray true profit in any sense discussed above. The figures are not adjusted for changes in price (except to the extent that LIFO or some comparable compensating device is used in the valuation of particular assets), and they apply only to interim periods of the life span. To some this might come as a startling and depressing revelation, but it is to be hoped that subsequent discussion will succeed in substituting an attitude of cautious acceptance of the reliability of such figures.

That periodic accounting profit figures are estimates cannot be denied, but the fact does not affect adversely the usefulness of the results shown. In fact, in some ways it contributes to the usefulness of accounting information in general. To say that true profit can be determined only over the whole life span of a business offers nothing so far as the purpose of accounting data is concerned. True profit in this sense is merely a historical fact rather than an existing condition. In order to make the "fact" most impressive, some control would have to be exercised over operations as they proceed. And this in turn would require some knowledge of the state of operations at the time. The interim profit reports might be only estimates, but as such they are far better than no gauge at all; and the likelihood is that the final over-all performance of the business (true profit, if you will) will be substantially better as a direct consequence of having relied upon these profit estimates for control purposes.

Furthermore, as suggested above, it matters not so much that the profit figure is an estimate as it does that the user be aware of the assumptions that underlie this estimate. It is entirely impossible to construct a single profit figure that would be most appropriate for all users. The responsibility of the accountant is to record transactions as accurately as possible and, on the basis of assumptions discussed earlier with respect to providing for principal value, draw up periodic summary reports expressed in terms of the standard unit of account. From this a user—be he executive, investor, creditor, or government employee—can then interpret the conditions portrayed in light of general economic conditions and his own particular objectives.

Under no conditions can any system of accounting be devised that can avoid the use of judgment in interpretation. It is not the purpose of profit figures (or any other form of accounting information) to provide absolute results. They can be used only in the light of the particular circumstances surrounding them as guides and indicators. The real danger in the general use of all such accounting information is that, being ex-

pressed in rigid arithmetic terms (the balance sheet balances right down to the last penny), the untrained person is likely to accept it in an absolute and undeviating sense. Foulke warns against this well when he states,[5] "Accounting net profit, even though determined according to and expressed in the language of the most exacting of all sciences is, at best, a very general figure." But one of the strongest statements in this regard is credited to Mr. Justice Jackson in a dissent to the majority opinion prevailing in a rate case.[6] It is as follows:

> To make a fetish of mere accounting is to shield from examination the deeper causes, forces, movements, and conditions which should govern rates. Even as a recording of current transactions, bookkeeping is hardly an exact science. As a representation of the condition and trend of a business, it uses symbols of certainty to express values that actually are in constant flux. It may be said that in commercial or investment banking or any business extending credit, success depends on knowing what not to believe in accounting. Few concerns go into bankruptcy or reorganization whose books do not show them solvent and often even profitable. If one cannot rely on accounting accurately to disclose past or current conditions of a business, the fallacy of using it as a sole guide to future price policy ought to be apparent. However, our quest for certitude is so ardent that we pay an irrational reverence to a technique which uses symbols of certainty, even though experience again and again warns us that they are delusive.

Some individuals might take issue with Mr. Justice Jackson on his manner of phrasing particular points. He does, in fact, seem to have been greatly worked up by the heat of the battle. But the general import of the statement cannot be denied, and it is therefore valuable in stressing the important point to which the whole first part of the present chapter leads, which is that *the accounting profit figures are only as good as the judgment of the person who uses them.*

Customary Form of the Profit and Loss Statement

Although understanding of the points developed up to now as to the character of profit and loss information is most important for proper interpretation, an appreciation of the standard form followed in presenting the information is also to be desired. An acceptable profit and loss statement taken from the 1951 annual report of the General Foods Company is presented in Exhibit I.

[5] Roy A. Foulke, *A Study of the Theory of Corporate Net Profits* (New York, Dun & Bradstreet, Inc., 1949).

[6] As reported in "The Varying Impact of State Regulations of Public Utility Earning Power," *Analysts' Journal*, fourth quarter, 1946, pp. 7 and 8.

Exhibit I

General Foods Corporation and Consolidated Subsidiaries

Statement of Earnings for the Fiscal Year Ended March 31, 1951

Gross sales	$635,018,607
Less allowances, outbound transportation, warehousing, and discounts	45,795,403
Net sales	$589,223,204
Cost of goods sold	$454,985,283
Selling, administrative, and general expenses, and other charges	83,730,258
	$538,715,541
Earnings from operations	$ 50,507,663
Other income:	
Dividends, interest, and discount earned	$ 1,352,635
Rents and royalties	278,018
Gain on sale of capital assets	216,671
Dividends from, and income adjustments relating to, subsidiaries not consolidated	318,301
Miscellaneous (net)	1,079,766
Total earnings	$ 53,753,054
Interest expense	823,857
Earnings before income taxes	$ 52,929,197
Estimated income and excess profits taxes:	
Federal income	$ 20,227,000
Federal excess profits	3,663,000
Other (foreign, state, and provincial)	2,632,000
	$ 26,522,000
Net earnings	$ 26,407,197
Dividends on preferred stock	847,228
Earnings applicable to common stock	$ 25,559,969
Dividends on common stock	12,823,565
Earnings retained in the business during year	$ 12,736,404
Earnings retained in the business at beginning of year	76,039,926
	$ 88,776,330
Add:	
Earnings retained in the business for 3 months ended Mar. 31, 1950	$ 3,923,660
Reserve for contingencies	11,858,691
Adjustments relating to acquisition and retirement of preferred stock	169,374
	$ 15,951,725
	$104,728,055
Less retained earnings transferred to common-stock account	50,000,000
Earnings retained in the business at end of year	$ 54,728,055

From this illustration it can be shown that in order to portray most effectively the various factors contributing to a net change in the owners' equity over a given period of time the items should be broken down into at least three separate categories: regular and operating, regular and incidental, and irregular, or nonrecurring. This latter could conceivably be divided into two parts.

The regular operating items constitute what is commonly known as the "operating section." For any type of business it will show the costs involved in generating the ordinary business income. The difference between the two will constitute the net operating income (Earnings from Operations). Since the primary concern of almost any user of the statement is with the profitability of a business in connection with the operations for which it was essentially established, isolation of these regularly recurring operating items is necessary to proper analysis or use.

With almost any business endeavor, however, there are certain income and expense items which are regular enough but which are incidental to the principal operating function. Incomes from miscellaneous investments in the form of dividends, interest, and rentals are examples, as are such expense items as interest on debt, amortization of debt discount, and income taxes. The Other Income items are realized from investments made outside of the ordinary operations of the business and therefore must be segregated. The Other Expenses must be so differentiated for one of two reasons or both. In the first place such expenses as interest and income taxes are not incurred in generating gross revenue; rather, they represent charges against the net income that is realized. And in the second place, the income tax cost is not subject to the control of management since the amount is governed by the amount of net income and the prevailing tax rate. Any cost that is beyond the control of management should be specially segregated so as to permit analysis for judging management efficiency.

In addition to these types of income and expense items there are others that are experienced in an irregular fashion. They may be incidental to or connected with ordinary operations, but the latter are more common. A write down of inventory or a gain or loss from the sale of fixed operating assets is a good example. Other examples would be recovery on prior years' taxes and loss from fire or theft insufficiently covered by insurance. Some of these items, though irregular from an annual periodic standpoint, are nonetheless rather ordinary and to be expected over an extended period of time. In judging long-term profitability, therefore, they must be included. Others are not only irregular but extraordinary and therefore should be discounted in judging the future.

In most cases principal interest is in the results from operations; the

other matters of concern, though vital, are actually only side issues to this central point. So even though there were no positive reason for segregating the nonoperating and nonrecurring items, accurate interpretation of operating performance would require in itself careful differentiation between those items which are involved regularly in operating activities and those which are not and those items over which management is able to exercise control in accomplishing its operating objectives and those over which it is not.

The threefold classification described contributes by its logic to more reasonable interpretation of over-all results. If interest is in the long-run profitability of the business as a whole, then attention will be given to the entire statement, with probably some special consideration given to the nonrecurring or surplus section. If, on the other hand, primary concern is with the operating performance of a business unit for a given period, special interest will be in the operating section alone. Understanding of the financing costs as well as the effectiveness with which the nonoperating assets are being put to work will require study of the information in the nonoperating section. And the importance of Federal tax levies in recent years has resulted in very serious attention being given to this part of the statement.

Questions

1. What is a profit and loss statement? What is its purpose? What is its principal form? Why is it generally divided into three parts?
2. How is the profit and loss statement related to the balance sheet?
3. What is the basis for the statement that the profit and loss statement is dynamic, the balance sheet static?
4. What is an expense? An income item?
5. In what sense is it appropriate to refer to practically all operating assets as deferred charges?
6. Does a profit and loss statement show true profit? Explain fully.
7. Does this fact adversely affect its usefulness?
8. Why is accounting for the profit of a going concern so very difficult? Explain the meaning of the heading, The Accounting Compromise.
9. What is depreciation? What is its purpose?
10. What are examples of other noncash charges to the profit and loss statement?
11. Explain fully the significance of the statement that "the accounting profit figures are only as good as the judgment of the person who uses them."
12. Why are interest and income taxes not considered operating expenses?

Chapter 5. HISTORICAL FLOW-OF-FUNDS ANALYSIS

In Chapter 3 the balance sheet is defined as a summary statement which portrays the financial position of a business as of a given time by listing the uses to which its funds are being put and the means by which these funds have been financed. The assets, in other words, represent the several ways in which the total business resources are employed in the quest for profits, and the liabilities and net worth items show the various financing methods used in providing the resources.

It was also pointed out that the balance sheet is in the nature of a snapshot; that the business process is a dynamic one with transactions occurring regularly, each of which affects in some way the immediately preceding financial position, or balance sheet. For example, merchandise is sold, thereby decreasing inventory and increasing cash. Wages are paid and cash decreases. A supplier's account is paid off, and this act results in a decrease in accounts payable and a decrease in cash. A balance sheet, therefore, merely provides a picture of a fleeting condition as of a given time. And if balance sheets at different times are compared, any differences are the result of transactions altering the beginning account balances during the interim.

In line with these points it becomes clear that the business process involves a continual conversion of cash into noncash assets, which are then reconverted back into cash. The intention is to regenerate more cash than was started with and in this way realize a net profit. The assets of a business have no value in a dormant sense; they possess value only in so far as they contribute to the generation of revenue by being used up. The noncash operating assets represent a transitional stage in the process of converting cash to cash through the business operation. That is why the condition portrayed by a single balance sheet is of little note. It is the change that is important, the size and vitality of the flow of funds through the business. The momentary financial position represented by a single balance sheet is important only to the extent that one is able to assume there will be little or no change in this position in the future.

This basic concept of fund flow through business operation was introduced in Chapter 1. Since it constitutes the core of the business process to which financial management must give attention, it must lie at the foundation of any financial analysis. The concept itself is necessary to proper interpretation of financial data for the dual objective of judging

solvency and profitability. But more than this, the actual analysis of a particular business's fund flow over a given period of time can aid substantially in developing perspective about and appreciation of this business's special operating characteristics, all of which is of paramount importance to the exercise of good judgment. That is why the subject matter of this chapter has been made to precede that of the following two chapters: such general knowledge about a business's operation is essential to intelligent judging of its prevailing financial condition and its profit prospects.

In studying the historical fund flow of any business three possible methods exist. One is the straight statement of balance-sheet changes between two points of time, another is the adjusted statement of balance-sheet changes, and the third is the outright statement of cash flow. These methods differ in their respective nearness to representing cash flow itself and, accordingly, in the amount of detailed preparation required. They are alike in form in that they all deal only with aggregate changes over a period of time rather than with the individual transactions that originally gave rise to the changes. For example, they all deal only with the net profit or loss for the whole period rather than with the individual income and expense flows that produced this figure. The methods, therefore, measure more the external aspect of the over-all flow, rather than the internal circulation.[1] The remainder of the chapter will be devoted to the explanation of each of these methods together with an actual illustration of their application.

Statement of Balance-sheet Changes

The net changes occurring in the values of individual asset and liability items between two balance-sheet dates can be used to portray in a very general fashion the external flow of funds in the business over the period covered, because, as has just been pointed out, these changes

[1] It may be recalled that in Chapter 1 the cash flow in a business enterprise was said to be made up of two parts, (1) the internal circuit flow and (2) the external flow which governs the expansion and contraction of the circuit flow. It is this latter external flow—the financing current—together with the shift of funds among various assets which balance-sheet changes portray. For example, we could assume a situation in which there were absolutely no changes in the balance-sheet items over a period of time, and no flow of funds would be evidenced. On the operating side, however, there might have been substantial activity: cash flowing into the business through sales and flowing out through expenses. Despite this internal operating activity the total asset investment on the two dates could remain constant in value, and the liabilities could remain the same although turning over substantially during the interim. The net worth could remain at the same figure by either there being no profit resulting or what profit there was realized being paid out prior to the final balance-sheet date.

are the net result of numerous individual transactions involving fund flow. Asset increases represent that additional funds have been applied (or invested). Liability increases indicate that new funds have been raised. For example, if the Inventory account increases in value, it would mean that additional dollars had been invested in this particular item. Or if Notes Payable had been increased, a net increase in money available for use in the business to the extent of the change would have been provided thereby. Conversely, a decrease in Inventory would have constituted a liquidation and therefore a source of funds and a decrease in Notes Payable a repayment or a use.

It matters not whether the interval covered between the two balance-sheet dates is 1 month, 1 year, 2 years, or 20 years, the governing principle remains the same. The selection of the period is important, however, in assigning meaning to the results. Since interpretation is to be based upon the amount of change, it follows that the change must be of a uniform sort and not a net result of two opposite movements. For example, in reviewing a business's financial record over a complete economic cycle it would be fruitless to cover the cycle in one review, for what changes were shown would be of a minor, long-run sort rather than cyclical. Rather, the whole cyclical period should be broken into at least its two basic components, the expansion phase and the contraction phase. Each phase in turn could be broken into smaller segments, but the important point is that the changes determined should correspond with some consistent economic cycle—whether it be one experienced by business in general or only the particular business under study.

Because every balance-sheet change in this generalized approach represents either a use of funds or a method of raising the funds so used, it is possible to classify the major types of changes in this way. For example, *uses of funds* are represented by (1) increases in assets (new acquisitions), (2) decreases in liabilities (paying off a debt), and (3) decreases in net worth (losses from operation or withdrawals of owners). Similarly, *methods of providing funds* (sources) are represented by (1) decreases in assets (conversion into cash through sale), (2) increases in liabilities (borrowing money), and (3) increases in net worth (contributions of new funds by owners or retained earnings).

The idea of a decrease in the asset item Cash representing a source of funds might seem to some to be contradictory. This point, however, introduces one aspect of the real meaning ascribed to the term "funds" as used in this analysis. It does not refer to cash on hand but rather to *cash value that is employed in the total operations of the business.* The cash balance is merely one of many different items needed in carrying out the operations. A decrease in it therefore means that much cash has been

freed for use in some other capacity—an increase in some other asset or a reduction of some liability. An increase in cash, on the other hand, signifies that funds available for general use were applied to the building up of the cash balance.

The person trained in accounting, furthermore, will recognize the potential errors in such arbitrary interpretations of change as those established above. For example, a decrease in plant or inventory may represent merely a cancellation of book value resulting from scrapping of certain properties and not have any bearing at all on cash inflow. Also, an increase in accruals or accounts payable does not strictly represent a source of cash for use in the business, but rather a support to cash through postponement of the disbursement. One of the most likely sources of error, however, is in connection with the surplus change. The net result may have been produced by any number of offsetting transactions, some involving cash flow and others not. Unless a surplus statement is available which provides a summary explanation of the net change, however, no reconciliation is possible.

In view of these potential inaccuracies of a statement of balance-sheet changes in measuring actual cash flow, a question might be raised as to its practical usefulness. To begin with, for many outsiders interested in gaining some appreciation of the past financial history of a company only the year-end balance sheet and an abbreviated profit and loss statement are available for analysis. The detailed information necessary to adjust balance-sheet changes to a real cash-flow basis is not available.

What is more, however, for many purposes of financial analysis it is not important that an exact cash expression be had. The fundamental purpose in studying balance-sheet changes is to gain a historical perspective on the financial management of a business in connection with the financing of asset requirements. Such background knowledge is useful in judging the soundness of the present financial condition and in appraising the prospects for the future. Clearly, for such a broad objective, precise calculation of cash flow is not required. In fact, the added effort employed in adjusting the balance-sheet changes to an exact cash basis would generally not be justified by the very slight improvement made, if any, in one's general appreciation of the financial history of the business. The important matter for such an objective is the flow of values, not cash—the conformance of financing method to changes in the amounts and proportions of various assets.

To illustrate the possible usefulness of a statement of balance-sheet changes in interpreting the past, the following example of the Elastic Stop Nut Corporation of America should prove helpful. Table 1 provides an eight-year review of the annual balance sheets of the company in

TABLE 1

ELASTIC STOP NUT CORPORATION

Condensed Annual Balance Sheets for the Eight Years 1941 to 1948, as of November 30

(In thousands of dollars)

Item	1941	1942	1943	1944	1945	1946	1947	1948
Assets								
Current assets:								
Cash and U.S. treasury notes	$2,098	$ 2,310	$ 2,104	$ 4,593	$ 6,115	$2,120	$2,483	$2,683
Accts. and notes rec.—net	1,838	3,468	5,256	2,415	256	255	205	424
Inventories—cost	1,924	2,272	9,089	7,118	1,930	1,529	1,551	1,724
Tax and terminal contract claims	58	44	2	1,799	3,850	1,609	494	137
Total	$5,918	$ 8,094	$16,451	$15,925	$12,151	$5,513	$4,733	$4,968
Fixed assets:								
Plant and equipment	$2,049	$ 3,887	$ 6,117	$ 6,243	$ 4,886	$5,102	$5,056	$5,006
Less depreciation reserve	423	841	1,711	2,793	4,257	3,914	3,982	3,959
Net property	$1,626	$ 3,046	$ 4,406	$ 3,450	$ 629	$1,188	$1,074	$1,074
Miscellaneous assets:								
Postwar tax refund	.....	$ 125	$ 1,060	$ 1,006				
Investments and misc. assets	$ 42	140	485	709	$ 687	$ 181	$ 264	$ 254
Total	$ 42	$ 265	$ 1,545	$ 1,715	$ 687	$ 181	$ 264	$ 254
Total assets	$7,586	$11,405	$22,402	$21,090	$13,467	$6,882	$6,071	$6,269

Liabilities and net worth								
Current liabilities:								
Accounts payable	$ 284	$ 692	$ 1,602	$ 997	$ 191	$ 149	$ 80	$ 108
Accruals	880	549	1,139	894	466	224	178	147
V loans payable [a]	.....	.....	7,000	4,500				
Reserve for Federal income taxes	3,568	2,278	1,990	2,561	810	516	...	133
Renegotiation refund—net	.....	2,001	1,430	1,001				
Misc. current liabilities	.....	97	1,953	1,094	1,637	27	29	89
Total	$4,732	$ 5,618	$15,114	$11,047	$ 3,104	$ 916	$ 287	$ 477
Fixed liabilities:								
Deferred credits	$ 5	$ 6	$ 6					
Debenture 5's, 1959	.....	......	......	$ 3,430	$ 3,185			
Total	$ 5	$ 6	$ 6	$ 3,430	$ 3,185			
Net worth:								
6% pfd. stock, $100 par	$ 185							
6% convert. pfd. stock, $50 par	.....	$ 2,500	$ 1,683	$ 1,367	$ 1,097			
Common stock	389	389	453	458	458	$ 458	$ 458	$ 458
Capital surplus [b]	.....	.....	833	901	930	880	881	881
Earned surplus	2,154	2,045	2,505	2,047	3,970	4,378	4,195	4,203
Reserves	122	780	1,500	1,500	500	250	250	250
Appropriated surplus	.....	67	308	341	223			
Total	$2,850	$ 5,781	$ 7,282	$ 6,614	$ 7,178	$5,966	$5,784	$5,792
Total liabilities and net worth	$7,587 [c]	$11,405	$22,402	$21,091 [c]	$13,467	$6,882	$6,071	$6,269

[a] Bank loans guaranteed by government for manufacturers on war contracts.

[b] Arising from conversion of 6 per cent preferred into common stock.

[c] Total assets and liabilities do not equal because of variation in effect from rounding off last digit.

TABLE 2

ELASTIC STOP NUT CORPORATION

Balance-sheet Changes, 1941 to 1944 and 1944 to 1948

Item	1941–1944		1944–1948	
	Increase	Decrease	Increase	Decrease
Current assets:				
Cash	$ 2,495	.....	.....	$ 2,010
U.S. Treasury notes	.....	.....	$ 100	
Accounts and notes receivable—net	577	.....	.....	1,991
Inventories	5,194	.....	.....	5,394
Tax and terminal contract claims	1,741	.....	.....	1,662
Total	$10,007	.....	.....	$10,957
Fixed assets:				
Plant and equipment	$ 4,194	.....	.....	1,237
Reserve for depreciation	2,370	.....	1,166	
Net property	$ 1,824	.....	.....	$ 2,403
Miscellaneous assets:				
Investment in associated company	.....	.....	195	
Postwar tax refund	$ 1,006	.....	.....	$ 1,006
Cash in retirement sinking fund	327	.....	.....	327
Patents—net	.....	$ 3	.....	4
Others	343	.....	.....	319
Total	$ 1,673	.....	.....	$ 1,461
Total assets	$13,504	.....	.....	$14,821
Current liabilities:				
Accounts payable	$ 713	.....	.....	$ 889
Accruals	14	.....	.....	747
V loans	4,500	.....	.....	4,500
Reserve for income taxes	.....	1,007	.....	2,428
Renegotiation refund—net	1,001	.....	.....	1,001
Miscellaneous	1,094	.....	.....	1,005
Total	$ 6,316	.....	.....	$10,570
Fixed liabilities:				
Deferred credits	.....	5		
Debentures 5's, 1959	$ 3,430	.....	.....	$ 3,430
Total	$ 3,425	.....	.....	$ 3,430
Net worth:				
6% preferred stock, $100 par	.....	185		
6% convertible preferred, $50 par	$ 1,367	.....	.....	$ 1,367
Common stock	69			
Capital surplus	901	.....	.....	20
Earned surplus	.....	107	2,156	
Reserves	1,373	.....	.....	1,250
Appropriated surplus	341	.....	.....	341
Total	$ 3,764	.....	.....	$ 822
Total liabilities and net worth	$13,505	.....	.....	$14,822

condensed form, with values expressed in thousand of dollars. Only casual attention to the facts portrayed is sufficient to note that the company experienced a remarkable asset expansion through 1944. Thereafter a sharp contraction occurred. In order to gain some appreciation of past financing policy, therefore, the total period 1941 to 1948 should be broken into at least two phases: 1941 to 1944 and 1944 to 1948. These two periods could in turn be broken into smaller units for the sake of more detailed understanding; but for the purpose of illustrating method such exactness is not at all essential, and for the sake of *general* interpretation such broad coverage is fully adequate.

The authors have not brought the figures more up to date intentionally because this would have involved breaking the over-all period down into three intervals. Also, the period since 1948 has not been nearly so dramatic in change as those between 1941 and 1944 and 1944 and 1948. The Elastic Stop Nut Company record from 1941 to 1948 is unique in many ways for illustrating the application of fund-flow analysis, and so it has been used despite some complications in the figures themselves and the danger of giving the material a dated appearance.

The reader should also note that the figures have been reduced to thousands, that is, the last three digits have been eliminated. This has not been done merely for convenience in the current illustration. Rather, this general practice of contraction is a basic analytical technique which should be followed in all cases. In the first place, interpretation is dependent upon relationships rather than absolute figures, and so nothing is lost by contraction. What is more, however, since accounting figures in the final analysis are nothing more than what might be termed intelligent approximations, it is both an idle waste of time and misleading to treat them in an undeviating manner.

In comparing the three balance sheets for 1941, 1944, and 1948 the changes shown in Table 2 in thousands of dollars are determined.[2]

By grouping these changes as to sources and uses of funds in accordance with the basis of classification established above, the summary statements shown in Table 3 may be constructed.[3]

Interpretation of financial policy during each period on the basis of these summary statements would proceed as follows: During the period 1941 to 1944 the principal need for funds was to expand current assets by some 10 million dollars and plant and equipment by 4.2 million. The

[2] The last digit of some totals may not equal the sum of the parts because of the error in rounding.

[3] It should be noted that an increase in the Reserve for Depreciation is treated as an increase in Net Worth. This is because the Reserve is increased through a noncash charge against income and so from a fund-flow standpoint the Earned Surplus increase is understated.

TABLE 3

ELASTIC STOP NUT CORPORATION

Summary of Balance-sheet Changes, 1941 to 1944

(In thousands of dollars)

Sources of Funds

Increases in liabilities:		
Current:		
Accounts payable	$ 713	
Accruals	14	
V loans	4,500	
Renegotiation refund—net	1,001	
Miscellaneous	1,094	
Total		$ 7,322
Fixed:		
Debenture debt		3,430
Increases in net worth:		
Capital stock and capital surplus:		
Preferred, $50 par	$1,367	
Common	69	
Capital surplus	901	
Total		$ 2,337
Earned surplus and reserves:		
Reserves	$1,378	
Appropriated surplus	341	
Reserve for depreciation	2,370	
Total		$ 4,089
Decreases in assets:		
Patents—net		3
Total funds provided		$17,181

Uses of Funds

Increases in assets:		
Current:		
Cash	$2,495	
Accounts and notes receivable	577	
Inventories	5,194	
Tax and terminal contract claims	1,741	
Total		$10,007
Fixed:		
Plant and equipment		4,194
Miscellaneous assets:		
Postwar tax refund	$1,006	
Cash in retirement sinking fund	327	
Others	343	
Total		$ 1,676
Decreases in liabilities:		
Deferred credits		5
Reserve for income taxes		1,007
Decreases in net worth:		
Capital stock and capital surplus:		
Preferred stock, $100 par		185
Earned surplus		107
Total funds used		$17,181

TABLE 3 (*Continued*)

ELASTIC STOP NUT CORPORATION

Summary of Balance-sheet Changes, 1944 to 1948

(In thousands of dollars)

Sources of Funds

Decreases in assets:		
Current:		
Cash	$2,010	
Accounts and notes receivable	1,991	
Inventories	5,394	
Tax and terminal contract claims	1,662	
Total		$11,057
Fixed:		
Plant and equipment		1,237
Miscellaneous assets:		
Postwar tax refund	$1,006	
Cash in retirement sinking fund	327	
Patents—net	4	
Others	319	
Total		$ 1,656
Increases in net worth:		
Earned surplus	$2,156	
Reserve for depreciation	1,166	
Total		$ 3,322
Total funds provided		$17,272

Uses of Funds

Decreases in liabilities:		
Current:		
Accounts payable	$ 889	
Accruals	747	
V loans	4,500	
Reserve for income taxes	2,428	
Renegotiation refund—net	1,001	
Miscellaneous	1,005	
Total		$10,570
Fixed:		
Debenture debt		3,430
Decreases in net worth:		
$50 par preferred stock	$1,367	
Capital surplus	20	
Reserves	1,250	
Appropriated surplus	341	
Total		$2,978
Increases in assets:		
Investment in associated company		195
Investment in U.S. Treasury notes		100
Total funds used		$17,273

major current asset needs, in turn, were inventories by an amount of 5.2 million and cash by 2.5 million. The principal means of financing these needs were current liabilities, 7.3; long-term debt, 3.4; new equity capital, 2.3; and retained earnings, 4.0. Since the expansion during this period was largely of a temporary sort brought on by war production, the financing of current assets by current liabilities to the extent done was to be approved. The use of 4.5 million dollars of V loans (government-guaranteed bank loans for war production) to help carry the expansion of 5.2 million in inventories was particularly advisable under the circumstances. Although the financial condition of the business appears on the surface to have been weakened by the financing followed, when judged in the light of the impermanence of the need for most of the expanded assets the temporary weakening becomes a long-run strength. The increase in long-term financing methods by 9.8 million dollars was sufficient to provide for the plant increase of 4.2, the increase in miscellaneous assets of 1.7, an increase in working capital of 2.7, and the retirement of other claims in the form of preferred stock and income taxes to a total of 1.2. Furthermore, by having part of this long-term financing in the form of callable debt and retirable preferred stock, further flexibility was provided to enable subsequent adjustment to contraction in sales and hence volume of assets needed.

The events of the period 1944 to 1948 give proof of the soundness of the financing followed in the preceding period. The principal source of funds was the conversion (or liquidation) of assets. The total amount provided in this way was some 13.9 million dollars: 11.0 from current assets, 1.2 from plant, and 1.7 from miscellaneous assets. The remaining 3.3 million was secured from retained earnings. The principal use of these funds, on the other hand, was retirement of debt and preferred stock to the total of 15.4: 10.6 current debt, 3.4 fixed debt, and 1.4 preferred stock. It is interesting to note just how closely the asset conversion and the liability liquidation conform. Had the business not made use of temporary financing devices during the expansion period, its later profit prospects would have been weakened by having idle cash balances and possibly recurring fixed charges on major portions of the total investment.

Adjusted Statement of Balance-sheet Changes

On the basis of this illustration it can be seen that an analysis of balance-sheet changes can provide very valuable perspective with respect to the past financial history of a company and for many purposes is fully sufficient. For certain purposes requiring more refined analysis, however, it may be desirable to construct a type of fund statement which adjusts the balance-sheet changes to a more accurate cash basis. But doing this

depends upon having access to supporting detailed information regarding those changes which have occurred from mere bookkeeping entries rather than cash transactions. These entries must be reversed so that their effect may be canceled out in preparing the fund-flow analysis. Some of the more common examples are depreciation, miscellaneous reserve allowances, amortization of deferred charges, and decreases in deferred credits.

Unless the resulting statement is prepared by management it is practically impossible to be complete in these adjustments. A large area of conjecture will always exist in the case of external preparation, but the use of supporting profit and loss and surplus statement data can add substantially to the general conclusions formed from the analysis of unadjusted balance-sheet changes.

Although it has been adjusted for most noncash transactions, some authorities still oppose referring to the resulting statement as a "fund" statement because some changes still do not represent cash flow in the strictest sense. The best example of this is in connection with the Accounts Receivable and Accounts Payable items. An increase in these accounts clearly does not represent a flow of cash, but rather a flow of value, and yet no correction is made to allow for this. Therefore, the statement is more accurately an explanation of the working-capital [4] flow rather than the cash flow. In keeping with this condition, current accounting practice leans toward treating the working-capital change as a single category and omitting the individual current asset and liability changes from separate consideration. This is the approach that the following discussion will be concerned with initially.

Some corporate annual reports carry a statement of this sort for a year's coverage along with the balance sheet and profit and loss statement. When not published in the annual report, it still may be constructed by the accounting department for use by management in interpreting the effect of the past year's operations upon the short-term financial condition of the business and in satisfying short-term creditors' demands for information that may be helpful in appraising loan applications. An illustration of the form and method of preparation may now be provided by use of the Elastic Stop Nut Corporation case again. In addition to the annual balance sheets, however, the supporting income statements must also be provided. These are given in condensed form in Table 4.

[4] "Working capital," as used here, means that part of the current assets financed by long-term means. The term, however, is one which does not have universal meaning in accounting and financial jargon. For many authorities it refers to *total* current assets rather than merely that portion financed by long-term funds. With such persons the term "*net* working capital" is used to refer to the concept employed here.

TABLE 4

ELASTIC STOP NUT CORPORATION

Annual Statements of Profit and Loss for the Years Ending November 30, 1942 to 1948

(In thousands of dollars)

Item	1942	1943	1944	1945	1946	1947	1948
Net sales	$25,357	$42,072	$37,894	$20,426	$2,822	$2,810	$3,306
Cost of goods sold [a]	8,537	22,434	26,912	14,768	2,292	2,016	1,984
Depreciation and accelerated amortization	......	891	1,169	1,700	58	42	43
Gross profit	$16,820	$18,748	$ 9,813	$ 3,958	$ 472	$ 752	$1,279
Selling and administrative expenses	2,711	5,635	6,161	2,953	1,594	1,294	1,010
Operating profit	$14,109	$13,113	$ 3,651	$ 1,005	$1,123 [b]	$ 542 [b]	$ 269
Other income [c]	71	147	386	767	110	39	123
Total income	$14,180	$13,259	$ 4,037	$ 1,772	$1,013 [b]	$ 503 [b]	$ 392
Other deductions:							
Interest	......	......	$ 469	$ 271	$ 106		
Gross renegotiation refund	$ 8,035	$ 1.510	1,001				
Federal income and excess profits tax (net of adjustment)	4,529	9,732	2,200	596	1,486 [d]	$ 366 [d]	$ 132
Miscellaneous debits [e]	10	52	246	11	394	47	
Reserve for contingencies	660	220	......	1,000 [d]	250 [d]		
Net profit	$ 946	$ 1,745	$ 121	$ 1,894	$ 223	$ 183 [b]	$ 260
Preferred dividends	24 [f]	119	91	90	38		
Common dividends	778	415	454	......	.....	.....	252 [g]
Surplus debits	253 [h]	750 [i]	33 [j]	118 [d]	223 [d]		

[a] Includes loss from forced sale of inventories: 1944—3,209; 1945—923; 1946—140; 1947—133; 1948—19.
[b] Deficit.
[c] Includes 1944, reduction in reserve for bad debts, 233; 1947, gain from sales of machinery, 22.
[d] Credit.
[e] Miscellaneous debits include 1944, loss on machinery and equipment; 1946, premium on redemption of debentures, 251, loss on equipment and abandoned project, 134.
[f] Reserved for cumulative dividends on preferred stock, 14.
[g] 68 declared and not paid.
[h] Preferred stock sinking fund reserve, 42; expenses incurred in issuance of convertible preferred stock, 211.
[i] Deferred maintenance reserve, 500; preferred stock sinking fund reserve, 250.
[j] Sinking fund reserve, 36; preferred stock sinking fund reserve, 2 (credit).

The difference in method between this and the previous approach is not in the balance-sheet changes themselves but rather in their interpretation. The individual changes remain the same, but some have to be adjusted for known amounts not involving cash flow. Furthermore, for reasons explained above, instead of treating the changes in current assets and current liabilities individually, the change in their aggregate net difference is considered. For the sake of clarity and understanding it is necessary to include the following work sheet, which shows the individual adjustments made and the resulting changes. The adjustments have been numbered so that their explanation may be more easily followed by reference to the particular number in the following discussion. The student with inadequate accounting background who finds it difficult to follow the logic behind all these adjustments may omit their consideration entirely without losing any of the fundamental value of the discussion.

Since the net change in Surplus is the result of a combination of individual transactions, one of the principal requirements in the construction of an adjusted statement of balance-sheet changes is to reconcile this net change in terms of the various contributing factors. That is, the single change must be eliminated by stating separately the individual entries that brought it about. After this has been accomplished, miscellaneous other corrections must be handled, particularly those which adjust the profit or loss to a cash basis. The following explanations are provided to help the reader understand the reasons behind the adjustments enumerated in Table 5.

Corrections Needed to Eliminate the Surplus Change

1. The combined profit figure for the three years is removed from the general Surplus account and called by the more explicit term Income from Operations.

2. A charge of $500,000 was made against Surplus and credited to Reserves in 1943. Also a total of $341,000 was charged against Surplus and credited to Appropriated Surplus during the years 1942, 1943, and 1944. Since these were bookkeeping transfers and had no relation to fund flow, they must be reversed.

3. According to footnote *h* of Table 4, Surplus in 1942 was charged for the $211,000 expense incurred in issuing new convertible preferred stock. Since this sum is more appropriately shown for fund-flow purposes as a reduction in the amount of funds provided by the sale of this stock, it should be debited to the Preferred Stock accounted and credited back to Surplus.

4. For the sake of clarity in presentation dividend distributions should be stated as such rather than obscured as a Surplus debit. This credit to

TABLE 5

ELASTIC STOP NUT CORPORATION

Source and Application of Funds Statement Work Sheet, 1941 to 1944

(In thousands of dollars)

Assets	Balance-sheet changes		Adjustments		Adjusted balance-sheet changes	
	Debit (Increase)	Credit (Decrease)	Debit (Increase)	Credit (Decrease)	Debit (Increase)	Credit (Decrease)
Working capital	$3,692	.....	.....	(9) $ 233	$3,459	
Fixed assets:						
Plant and equipment	4,194	.....	(10) $ 246 (6) 108	.....	4,548	
Reserve for depreciation (credit)	2,370	.....	(5) 2,478	(6) 108		
Net property	$1,824	.....	.....	.....	$4,548	
Miscellaneous assets:						
Postwar tax refund	$1,006	.....	.....	(8) 1,006		
Cash in retirement sinking fund	327	.....	.....	.....	$ 327	
Patents—net	.....	$3	.....	.....	.....	$3
Others	343	.....	.....	.....	343	
Total	$1,673	.....	.....	.....	$ 667	
Total assets	$7,189	.....	.....	.....	$8,674	

Liabilities and net worth	(Decrease)	(Increase)	(Decrease)	(Increase)	(Decrease)	(Increase)
Fixed liabilities:						
Deferred credits	$ 5	.....	.....	(11) $ 5		
Debenture 5's, 1959	.....	$3,430	.....	.....	.....	$3,430
Total	.....	$3,425	.....	.....	.....	$3,430
Net worth:						
6% pfd. stock, $100 par	$ 185	.....	.....	.....	$ 185	
6% conv. pfd. stock, $50 par	.....	$1,367	(3) $ 211	(12) $ 970	.....	2,126
Common stock	.....	69	(12) 69			
Capital surplus	.....	901	(12) 901			
Reserves	.....	1,378	(7) 880	.....	2	
			(2) 500			
Appropriated surplus	.....	341	(2) 341			
Earned surplus	107	.....	(1) 2,812	(2) 841		
				(3) 211		
				(4) 1,867		
Total	.....	$3,764	.....	.....	.....	$1,939
Total liabilities and net worth	.....	$7,189				$5,369
Income from operations:						
Profit, 1942, 1943, 1944	.....	.....	(8) $1,006	(1) $2,812	.....	$5,172
			(9) 233	(10) 246		
			(11) 5			
Depreciation reserves	.....	.....	.....	(5) 2,478		
				(7) 880		
Dividends:						
Preferred	.....	.....	(4) 220	.....	$ 220	
Common	.....	.....	(4) 1,647	.....	1,647	
						$3,305
						$8,674

the Surplus account is the final one required to eliminate the net increase of $107,000.

Corrections Needed to Adjust the Accumulated Net Profit for the Three Years to a Cash Basis

5. The sum of the depreciation charged against operating income for the three years must be added back and at the same time debited to the Reserve for Depreciation. In other words, operations generated more cash than just the net profit by at least the amount of the noncash expense, Depreciation. Since no figure is given for the year 1942, it had to be estimated by taking the increase in the Reserve from 1941 to 1942.

6. Since the total depreciation for the three years amounts to $2,478,000, whereas the Reserve for Depreciation increased over that time by only $2,370,000, the discrepancy of $108,000 is most reasonably explained as representing the amount the Reserve was debited in connection with sales or write downs of fixed property. This amount, then, must be added back to the Property account in order to show the full amount of additions over the time. It must also be deducted from the Reserve change, thereby eliminating this change entirely. The reason this is classed as a profit adjustment is because of its direct association with the depreciation correction.

7. In the years 1942 and 1943 the Reserve for Contingencies account was increased by $880,000 through charges made to net income. Clearly these were bookkeeping entries not involving fund flow, and so income from operations must be increased by that amount and the increase in the Reserve eliminated.

8. The increase in the Postwar Tax Refund account of $1,006,000 merely represents a receivable against the government which has accumulated. Since it has been reckoned as income but is in fact not cash, it must now be subtracted from the net profit figure and the receivable eliminated.

9. Footnote *c* to Table 4 says that a reduction in the Reserve for Bad Debts account was treated as Other Income in the year 1944. Since this was merely a correction on the books and did not constitute cash income, it must be reversed and the net profit figure reduced accordingly.

10. Footnote *e* to Table 4 declares that income in 1944 was charged with a loss of $246,000 from the sale of fixed assets. This was not a cash loss but rather a loss of book value. Therefore, net profit must be increased by this sum and the increase in fixed assets added to.

11. A decrease in a deferred credit represents income realized for which cash had been received prior to the time covered. The decrease

of $5,000 in this case, therefore, must be eliminated and that amount subtracted from the profit figure.

Miscellaneous Corrections of Noncash Transactions

12. A footnote to the balance sheets indicates that the Capital Surplus has been created through the conversion of the preferred into common. This means that the book value of the new common stock issued has not been equal to that of the preferred canceled. It also means that the increase in common stock accounted for by the conversion has not provided funds and that the funds provided by the sale of preferred stock are understated to the extent of the amount converted. This misrepresentation may be counteracted by canceling out the Common Stock and Capital Surplus changes and adding their combined value back to the Preferred Stock account. This is admittedly an approximation of the real facts, but in the absence of an exact statement of stock sales over the period it is probably as accurate a representation of fund flow as it is possible to obtain. We know, for example, by referring to the 1942 balance sheet that preferred stock outstanding at that time was $2,500,000. Therefore the figure of $2,337,000, which is obtained from the above adjustment, would seem to be a reasonable estimate of the amount originally sold minus the amount subsequently redeemed.

A more clear-cut fund-flow statement can now be derived from the third group of columns in Table 5 showing the adjusted balance-sheet changes. The right-hand column by showing decreases in assets and in-

Table 6

Elastic Stop Nut Corporation

Source and Application of Funds Statement for the Period 1941 to 1944

(In thousands of dollars)

Sources of Funds		*Uses of Funds*		
Sale of debenture bonds	$ 3,430	Increase in working capital		$ 3,459
Sale of convertible preferred stock	2,126	Increase of plant and equipment		4,548
Income from operations	5,172	Increase of cash in retirement sinking fund		327
Decrease in patents	3	Increase in other miscellaneous assets		343
		Redemption of old preferred stock		185
		Decrease in reserves		2
		Payment of dividends:		
		Preferred	$ 220	
		Common	1,647	1,867
Total funds provided	$10,731	Total funds used		$10,731

TABLE 7

ELASTIC STOP NUT CORPORATION

Source and Application of Funds Statement Work Sheet, 1944 to 1948

(In thousands of dollars)

Assets	Balance-sheet changes		Adjustments		Adjusted balance-sheet changes	
	Debit (Increase)	Credit (Decrease)	Debit (Increase)	Credit (Decrease)	Debit (Increase)	Credit (Decrease)
Working capital	.....	$ 387	.....	.....	.....	$ 387
Fixed assets:						
Plant and equipment	.....	1,237	$ 134 677	.....	.....	426
Reserve for depreciation (credit)	$1,166	.....	1,843	$ 677		
Net property	.....	$2,403	.....	.....	.....	$ 426
Miscellaneous assets:						
Investment in associated company	195	.....	.....	.....	$ 195	
Postwar tax refund	.....	1,006	.....	.....	.....	1,006
Cash in retirement sinking fund	.....	327	.....	.....	.....	327
Patents—net	.....	4	.....	.....	.....	4
Others	.....	319	.....	.....	.....	319
Total	.....	$1,461	.....	.....	.....	$1,461
Total assets	.....	$4,251	.....	.....	.....	$2,274

Liabilities and net worth	(Decrease)	(Increase)	(Decrease)	(Increase)	(Decrease)	(Increase)
Fixed liabilities:						
Debenture 5's, 1959	$3,430	.....	.....	.....	$3,430	
Net worth:						
6% conv. pfd, $50 par	1,367	.....	.....	.....	1,367	
Common stock						
Capital surplus	20	.....	.....	.....	20	
Reserves	1,250	.....	.....	$1,250		
Appropriated surplus	341	.....	.....	341		
Earned surplus	.....	$2,156	$ 341	380		
			2,195			
Total	$ 822	.....	.....	.....	$1,387	
Total liabilities and net worth	$4,252				$4,817	
Income from operations:						
Profit, 1945, 1946, 1947, 1948	.....	.....	.....	2,195	.....	$2,922
Depreciation	.....	.....	.....	1,843		
Reserves	.....	.....	1,250			
Loss from sale of equipment	.....	.....	.....	134		
Dividends:						
Preferred	.....	.....	128	.....	128	
Common	.....	.....	252	.....	252	
						$2,542
					$2,275	

creases in liabilities and income items represents the sources of funds. The left-hand column shows the various uses of the funds. A formal summary statement would appear as in Table 6.

We can see from this statement (Table 6) that by dealing only with working capital changes and by making the necessary noncash adjustments the fund flow takes on much sharper lines. Although, as stated earlier, complete adjustment by an outsider is practically impossible because of the unavailability of some of the more detailed transactions, the procedure illustrated above can go a long way in giving an accurate portrayal of actual fund flow. Comparison should be made with the other statement covering this period, Table 3, which was developed from the unadjusted approach to determine what the differences are and to explain why they do exist. The decrease in patents of $3,000 and the decrease in reserves of $2,000 in Table 6 are probably evidences of changes that would have been canceled out had the detailed information surrounding their causes been available. As it is, they are of such insignificant amount as to have practically no bearing on interpretation.

The development of the statement for the 1944 to 1948 period is presented in Table 7 without elaboration. The student who is sufficiently trained in accounting will be able to follow through the adjustments and make explanation on the basis of the above illustration and supporting data contained in footnotes to the balance sheet and profit and loss statements. In any case the final statement of sources and uses, Table 8, again should be compared with the earlier one in Table 3 for the same period so that differences may be noted and explained and an appreciation of the general nature of this more exact form thereby gained.

Table 8

Elastic Stop Nut Corporation

Source and Application of Funds Statement, 1944 to 1948

(In thousands of dollars)

Sources of Funds		*Uses of Funds*		
Income from operations	$2,922	Redemption of debenture bonds		$3,430
Decrease of working capital	387	Redemption of convertible preferred stock		1,367
Decrease of plant and equipment	426	Purchase of investment in associated company		195
Decrease in postwar tax refund	1,006	Reduction of capital surplus		20
Decrease in cash in retirement sinking fund	327	Payment of dividends:		
Decrease in patents—net	4	Preferred	$128	
Decrease in other miscellaneous assets	319	Common	252	380
Total funds provided	$5,391	Total funds used		$5,392

By concentrating on only net changes in working capital, this type of source and application of funds statement has the special virtue of focusing attention upon the long-term or permanent financing arrangements of the company. The automatic or direct financing of current assets by short-term means is subordinated on the ground that these temporary financing devices conform somewhat automatically to varying needs, that the fundamental financing problem is in providing for the more permanent asset requirements. Concern, in other words, is with what part of the current assets is financed by short-term means, not what form these short-term methods take. As seen in the above examples, the financial record is interpreted in terms of working capital needs and their associated fixed asset requirements.

A net increase in working capital suggests that more dollars of current assets are being financed by long-term means. This could result from a shift in asset proportions from fixed to current, an increase in total assets, an increased reliance upon long-term financing methods, or some complementary or off-setting combination of both. A net decrease in working capital, on the other hand, indicates either a shifting of asset proportions from current to fixed, a decrease in total assets, an increase in the proportion of short-term financing methods for current assets, or a combination of any of these. The term so often heard, "financed out of working capital," refers to just such a situation as this net decrease in working capital. Liquid resources may be consumed in acquiring fixed assets or in paying off a long-term debt, or short-term debts may be acquired for either of these purposes. In any case, the financing has been done out of working capital.

We shall find in our study of the next chapter that a working capital figure may have little or no meaning in itself. A *change* in working capital, on the other hand, may have significant meaning if considered in the light of the reasons for the change or if related to some other measure of current position. In this connection, the type of source and application of funds statement illustrated above, Tables 6 and 8, with its attention to working capital change, can be very informative. For example, one significant point brought out by the above two statements is that whereas working capital increased by $3,459,000 in the early period it decreased by only $387,000 in the later period. The question immediately arises as to whether or not future operations will be able to support such a "permanent" expansion of working capital.

Statement of Working Capital Changes

This question raises an important point. If concern is entirely with a business's working capital position and not with the associated fixed asset

requirements, it may be necessary to go back to the changes in the individual components that determine the final working capital figure. The adjusted statement of balance-sheet changes may provide an analysis of the long-term financial record in terms of the working capital changes, but it fails to give attention to the details of the past short-term financial management. What changes, if any, have taken place in the composition of the current assets? What changes, if any, have been made in methods of short-term financing? These are questions that must be answered if real appreciation of the working capital changes is to be had and through it ability to judge effectively past financial management of the current position.

To accomplish such an objective, a full statement of adjusted balance-sheet changes in detail is not necessary—all that is required is one that explains the net change in working capital. If we take the periods 1941 to 1944 and 1944 to 1948 for the Elastic Stop Nut Corporation case and deal only with the current items, for example, we can show results as in Table 9.

As with the original statement of balance-sheet changes, these summaries permit checking of financing methods in relation to the asset needs. They provide a check, in other words, on the suitability of the working capital change. A substantial change in working capital along with a temporary seasonal or cyclical expansion of current assets is generally inadvisable. On the other hand, a minor increase in working capital when assets are being expanded on a rather permanent basis is subject to question. When all that is known is the net change in working capital and the corresponding change in the investment in current assets is not known, there is insufficient basis upon which to judge the past completely. The adjusted statement of balance-sheet changes provides one with a good perspective on the financial history of a company, but to be able to pass full judgment on the financial practices followed, the details of the working capital change must also be known.

For example, on the basis of the preceding two summary statements of working capital change we can now understand and somewhat approve the basis for the net change in working capital of $3,072,000 for the period 1941 to 1948 originally brought out by the analysis of adjusted balance-sheet changes. Instead of its representing a permanent increase of current assets, which might not be able to be supported by future business volume, or a decrease in ordinary short-term financing methods, which could also be unwise policy, it has in fact come about almost wholly by reduction of the Federal tax liability, which is a normal condition when volume and profits decline. There is still the possibility, however, that the current asset investment required by the peculiar war circum-

TABLE 9

ELASTIC STOP NUT CORPORATION

Summary of Changes in Working Capital, 1941 to 1944
(In thousands of dollars)

Item	Increase	Decrease
Current assets:		
Cash	$2,495	
Accounts and notes receivable—net	344	
Inventories—cost	5,194	
Tax and terminal contract claims	1,741	
Total	$9,774	
Current liabilities:		
Accounts payable	713	
Accruals	14	
V loans payable	4,500	
Reserve for Federal income taxes	.....	$1,007
Renegotiation refund—net	1,001	
Misc. current liabilities	1,094	
Total	$6,315	
Net increase in working capital	$3,459	

Summary of Changes in Working Capital, 1944 to 1948
(In thousands of dollars)

Item	Increase	Decrease
Current assets:		
Cash	....	$ 2,010
U.S. Treasury notes	$100	
Accounts and notes receivable—net	....	1,991
Inventories—cost	....	5,394
Tax and terminal contract claims	....	1,662
Total	....	$10,957
Current liabilities:		
Accounts payable	....	889
Accruals	....	747
V loans payable	....	4,500
Reserve for Federal income taxes	....	2,428
Renegotiation refund—net	....	1,001
Misc. current liabilities	....	1,005
Total	....	$10,570
Net decrease in working capital	....	$ 387

stances that gave rise to such a high income tax liability as was borne in 1941 might be excessive for postwar demand.

Analysis of Cash Flow

The point has already been made that even the adjusted balance-sheet changes approach to the sources and applications of funds is not designed to portray cash flow exactly. Disregarding the approximations to cash flow that have to be made by an outsider for lack of the detailed supporting facts, there is a basic feature of the approach that prevents its being a precise measure in this regard. As already shown, the term "funds" refers to "working funds" and not cash. An increase in accounts receivable is not strictly an application of cash, for cash in that amount has not yet been received. This point was fully explained in Chapter 3. Similarly, an increase in accounts payable has not provided cash, although it has made possible the acquisition of goods or services with cash value. The same applies to accruals of one sort or another. The point is that the above approach to the source and application of funds is not accurate as an exact measure of *cash* flow to the extent that there are sales or purchases of goods and services on credit.

Should there be cause for converting the changes in working capital to a cash base, it could be accomplished through the further adjustment of the profit figure beyond that which was done for the adjusted statement of balance-sheet changes. An increase in accounts receivable would be subtracted as noncash income, and an increase in accruals would be added as noncash expenses. An increase in accounts payable could also be added back as a noncash charge, but if there has been a corresponding increase in inventory, it would be better shown as a subtraction from this application. A decrease in inventory is preferably shown as a noncash expense rather than a source of funds in itself. In the Elastic Stop Nut case, for example, footnote *a* to the profit and loss statement indicates that losses from obsolete inventory were included as part of cost of sales. These losses did not represent a cash drain and would have had to be added back to the profit for the years shown if interest had been in cash exactly. This adjustment was disregarded in the above development of the source and application of funds statement because concern was with working capital changes rather than cash changes and the loss on inventory did constitute a drain of working capital.

Precise cash adjustments such as those suggested above are generally valuable only for management purposes in exercising control over the operating cash fund. For such a purpose, however, management has available to it cash statements which do not have to be reconstructed in this manner. And for purposes of external analysis, such careful ad-

justment to a cash base is likely to be of little worth and thereby to constitute wasted effort. Chapter 9, "Planning to Maintain Solvency," discusses the various cash records and summary statements that account specifically for changes in the cash balance, and so further consideration is unnecessary at this time.

Summary

The operation of business enterprise is based upon the conversion of cash to noncash assets which when used are reconverted back into cash form. The funds used in this circuit flow may be raised in any number of different ways, but the selection made together with the associated uses bears strongly upon the soundness of the financial program. In order to judge financial management effectively it is well to review the record of the past as to the sources and uses of such funds.

Although the business records would contain all the information necessary for the preparation of such a review, outsiders interested in it for the purpose of judging the present financial condition and appraising the prospects for the future would not have access to it and would have to rely upon published statements. Since the balance sheet presents the uses of funds as of a single date and the means that have been relied upon in providing these resources, a rough approximation to a past period's application of funds and the sources from which they were obtained may be had by noting changes between the beginning and ending balance sheets. Such a statement of balance-sheet changes, though not an exact expression of fund flow, can provide the user with a substantial historical perspective on financial policy by indicating the flow of values through the business and the conformance of the financing methods used to the variations in operating asset needs.

With more supporting data in the form of a profit and loss and surplus statement it is possible to adjust for the noncash balance-sheet changes and give a more exact portrayal of fund flow. Since the usefulness of any source and application of funds statement, however, is in portraying general features of past financial management rather than precisely accounting for changes in cash balance, the preferable approach is to deal with net changes in working capital. Certain noncash changes in the current items are thereby ignored. The resulting statement in itself is useful in focusing attention on the long-term or permanent financial arrangements of the company. But if there is also need for judging the past practices rather than merely reviewing them, it may become necessary to study the changes in the individual current asset and liability items as they bear upon the net change in working capital.

Regardless of whether the analysis is merely one of balance-sheet changes, an adjusted statement of balance-sheet changes, a study of working capital changes, or a complete analysis of cash flow, the process of analysis as well as the results themselves will be of significant value. Even if the results happen not to be very revealing, the effort expended in getting them will be worth while. For in the process of studying and interpreting past changes one cannot help acquiring a general appreciation of the business operation together with its past financial history, both of which will benefit him immensely when he comes to judging the financial condition and the profit prospects of the company.

Questions

1. How does a statement of balance-sheet changes contribute to the administration of the financial function in business?
2. What is the meaning of the term funds as used with this statement?
3. What constitutes a source of such funds? An application or use?
4. Is a decrease in cash a source or application? Explain fully.
5. What is gained by constructing an adjusted statement of balance-sheet changes? A statement of working capital changes?
6. Why is it necessary to eliminate the net change in surplus if we are to get a more accurate portrayal of fund flow? What are some of the principal changes made?
7. What does the term funds refer to as used in connection with the adjusted statement of balance-sheet changes? How does this differ from its meaning as used with the straight statement of balance-sheet changes?
8. Why is the fund flow represented by the adjusted statement still not cash flow? What further adjustments would have to be made if a statement of pure cash flow were to be obtained?
9. What is the difference between the external flow of funds and the internal circuit flow?
10. Where is evidence of the internal circuit flow provided?

Chapter 6. CONVENTIONAL ANALYSIS FOR JUDGING FINANCIAL CONDITION

Scope of Analytical Treatment Covered

As stated in the previous chapters, the financial statements are used by four chief groups: the management, the short-term creditors, those with a long-term investment interest in the business, and governmental and other miscellaneous organizations. The usefulness of these statements from any standpoint depends upon their reliability and fullness, an accounting matter, and the ability of the user to understand and appreciate the significance of what is presented. This latter topic constitutes the chief concern of this and the following chapter.

Where the statements have been audited by a qualified independent public accountant, the likelihood of trouble on the first score, that of unsatisfactory accounting, is greatly reduced. Generally the simplest way for the management to assure reports that will satisfy outsiders is to have them prepared at not less than annual intervals by such a certified public accountant. In view of the possible penalties of the law for the issuance of false statements, the management may find that course a form of insurance against mistakes that might arise from a failure to appreciate the requirements of proper accounting techniques. Such certified statements also have value in engendering confidence where credit is sought.

The following material on analytical methods and techniques will be based on the assumption that the information contained in the statements is reliable in the sense of standard accounting rules having been followed in their preparation. True, certain general tests of reliability, particularly with reference to consistency, are part of a sound analytical approach. The concluding part of Chapter 3 even mentioned ways of supplementing incomplete balance-sheet information. But to devote attention to the whole matter of testing for reliability would get us into the subject matter of auditing, which is far beyond the scope and purpose of this section. When the analyst has reason to question the reliability of statement material, we shall find that he may be able to make certain allowances and then proceed with the generally used tools to be discussed. If such adjustment cannot be made by himself, he is forced to seek out more reliable information or else disregard the project.

By relying upon this assumption of accounting reliability a large area of business activity requiring sound financial analysis for one purpose or

another will in one sense be sidetracked. There are a multitude of very small businesses the proprietors of which have neither the training, the knowledge, nor the inclination to keep full and accurate records. Many have developed for their own particular needs rather ingenious devices, it is true, which, though not conforming to standard procedure, are nevertheless highly satisfactory. Others, on the other hand, undoubtedly shackle their operations by clumsy and slipshod methods. Although many of the analytical techniques to be considered will in themselves be somewhat too elaborate and sophisticated for the needs of the small business operation, the logic and concepts involved will be directly applicable.

Balance-sheet Limitations

In the previous chapters the balance sheet was described as a snapshot of the financial condition of a going concern since it summarized the uses to which a business had put its funds on the one hand and the financing methods employed on the other as of a single point of time. Extreme care must be exercised, however, in the interpretation given to the term financial condition in this sense. Since by definition a balance sheet is out of date by the time it is available for use, the historical record furnished has little meaning in and of itself. To be at all useful, the statement must provide a basis for judging the existing financial status, not the past, and it can serve this purpose only if it is reasonably representative of conditions that exist now and can be expected to prevail in the period to follow. A balance sheet, for example, that is prepared just prior to the seasonal expansion period of a business might greatly differ from the actual financial position of the concern three months thereafter. Such a statement would be a very poor expression of financial condition, for this is a dynamic concept suggesting ability to meet obligations as they mature; and if the balance sheet as of a given date does not convey this future condition, it cannot be relied upon.

Another way of looking at the point is that the internal circuit flow of a business is what is at the base of its financial condition. Remaining solvent means generating sufficient funds from operations to cover all cash expenses and still meet maturing obligations. A balance sheet, therefore, by portraying a momentary situation is not in and of itself able to convey future fund flow. That is why a record of the past as developed in the last chapter may prove helpful. However, we shall find that certain balance-sheet information can be and is used to suggest a business's financial condition in this dynamic sense if certain assumptions are felt to hold.

There are two aspects of the financial condition of any business to be investigated: the short-term, or current, and the long-term, or fixed. The

short-term condition relates to the technical solvency of the business in the near future. The long-term has reference to the financial structure that has been imposed on the business in financing the more permanent asset requirements. Neither is completely independent of the other; a sound long-term condition may be jeopardized by a weak current one, and vice versa. But the long-term condition of a business in itself is much less subject to sudden change as a result of seasonal fluctuations than is the short-term and therefore not as subject to the caution stated above. That the short-term condition may not be accurately portrayed by a balance sheet because of its unrepresentative character at the time, on the other hand, is supported by the following quotation taken from a statement of the financial-condition form approved by the National Association of Credit Men:

> The foregoing statement [balance sheet and supporting data] has been carefully read by the undersigned (both the printed and written matter), and is, to my knowledge, in all respects complete, accurate, and truthful. It discloses to you the true state of my (our) financial condition on the   day of   19   . Since that time there has been no material unfavorable change in my (our) financial condition, and if any such change takes place I (we) will give you notice. Until such notice is given, *you are to regard this as a continuing statement.* [Italics and brackets supplied by authors.]

Unless the analyst is reasonably able to assume that the balance sheet given is a *continuing statement* of financial condition, in other words, he cannot feel free to rely upon it as a gauge of the ability of the business to remain solvent. This is the most basic of the controlling assumptions referred to above.

Ratio Analysis as an Interpretation Tool

Ratio analysis is one of the principal devices used in judging the condition portrayed by the financial statements. The dollar values of individual items often mean little or nothing in themselves. Their adequacy or suitability depends upon their relationship to associated items. The absolute amount of cash, for example, is unimportant, but it becomes significant when compared with current liabilities, average monthly cash expenditures, and total assets.

A ratio in and of itself, however, is not necessarily helpful. In order to serve the need of the analyst, it must be based upon a logical and meaningful operational relationship. This point cannot be given too much stress. Frequently the subject of statement analysis is approached by reviewing a whole series of different ratios in terms of their general meaning and applicability. As a consequence, the student in working a problem on his own often proceeds by calculating all these ratios and then

rationalizing some meaning for them whether they have any real applicability to the case at hand or not. Preferably, one should begin by studying the general circumstances of his case and then calculate those particular relationships which will best guide him in solving his particular problem. One ratio might very well suggest the need for others, and in this manner a logical pattern is constructed. There are some commonly used ratios, it is true, such as current assets to current liabilities or total assets to total debt, which have rather general applicability. But at the same time it is safe to say that there are some ratios described by standard textbook writers which are almost never employed in business and financial practice.

It must be recognized, further, that the ratios will not provide a definite answer to financial problems. There is always the question of judgment as to what significance shall be given to the figures. While some standards of reference and sources of background material will be found useful in this connection, in the final analysis the individual must rely upon his own good sense in selecting and evaluating. This important consideration should not be overlooked by the student who is sometimes prone to seek mechanical solutions to business problems.

Finally, the question necessarily arises as to what standards are to be found for the various relationships or ratios. Effective judging of the condition they portray may be achieved only by having some meaningful figure to which they can be compared. There are three kinds of data which are used as standards from time to time. The "absolute" standard is the weakest of all, for it suggests the existence of some inherent trait common to all business, which is generally far from the case. Nevertheless, the 2 to 1 minimum standard for the current ratio and the 1 to 1 requirement in the case of the quick ratio are examples of absolute standards that are used for some purposes and by some analysts. (The meaning and uses of these two ratios will be discussed shortly.)

A much more useful figure is the average performance of other business units in the particular industry, which is known as the "industry" standard. Another very useful type of information, particularly for internal control purposes, is the "historical" standard, which simply draws upon the past records or performance of the particular business under investigation. Reliance upon both these last two standards in testing a particular condition often produces revealing results. For example, it might be found that a company's performance falls below that of the average for the industry, but if there has been a steady improvement within the company for the past several years, one's ultimate judgment will be much more favorable than it would have been otherwise.

Conventional Analysis for Judging Technical Solvency

In judging the technical solvency of a business from published statements the balance sheet constitutes the primary source of information, but as will be seen, profit and loss data are often applied to balance-sheet figures for certain tests. The point has already been made that the historical fact of balance-sheet information is useful only to the extent that it suggests what might reasonably be expected to prevail in the future. In judging technical solvency this is particularly true, for concern is to be had with the specific liquidity of the assets on the one hand and the specific maturity of the liabilities on the other, both of which relate to future developments. Since the items on the balance sheet have already been classified in this manner according to those assets which will ordinarily be converted into cash within the ensuing year and those liabilities which will be payable within a year's time, a crude beginning is to divide the current assets by the current liabilities.

This ratio is known as the "current ratio." Its interpretation is somewhat difficult because of its basic crudity. A standard rule of thumb with respect to its minimum requirement, as stated earlier, is 2 to 1; but indiscriminate use of this standard is extremely dangerous. No generalization can be made safely with respect to what the ratio ought to be; the meaning of a given result will vary with the type of business, the operating strength of the business, practical circumstance, the time of the year, the stage of the business cycle, etc. A business with a 3 to 1 ratio, for example, might well be approaching technical insolvency if its current assets are predominantly slow-moving inventory and its liabilities are mainly maturing within the very near future. A company showing a 0.7 to 1 ratio, on the other hand, need have no worries about preserving its technical solvency if its assets are largely in cash form, the bulk of its liabilities is not expected to mature before eight months, and its operations are sufficiently strong to generate additional cash by the time of maturity.

Because of this crude character of the current ratio further tests of liquidity are often required to provide a more precise insight into the technical solvency of a business. Since the current ratio groups all the current assets into a single figure, though these separate assets vary substantially in their nearness to cash, a worth-while device for testing the goodness of a current ratio is to determine the *percentage composition* of the individual items. What per cent is cash, receivables, and inventory of the total current asset figure? If, for example, a current ratio is 3 to 1, but inventory, the item which is generally two stages away from cash,

amounts to 80 per cent of the total current assets, the near-term technical solvency of the business, though not necessarily doubtful, is much more uncertain than might appear on the surface.

Another device for testing the adequacy of the current ratio by isolating inventories from the other more liquid items is the "acid test," or "quick ratio." Instead of relating all the current assets to the current liabilities, this ratio compares only the most liquid assets, such as cash, receivables, and marketable securities, to the total short-term debts. In the above case, for example, where inventories amounted to 80 per cent of total current assets and the current ratio was 3 to 1, the quick ratio would be 0.6 to 1. That is to say, cash and receivables now on hand amount to only 60 per cent of total current liabilities.

In those cases in which the adequacy of the current position is heavily dependent upon the quality of the inventories, by which is meant their nearness to cash, attention should be given to investigating the items contained in the over-all inventory count and the basis of their valuation. For management purposes and some credit purposes a physical check of the inventory to determine such quality is possible. The object would be to determine obsolete or damaged items, accuracy of physical count, and conformance to market standards. Sometimes, however, a knowledge of past experience with respect to the average conversion rate of the inventory may be more indicative than a physical check, and in those cases where the analyst does not have access to the detailed records of the business, an approximation of this condition may be all that is possibly attainable.

The accepted method for determining the average convertibility of the inventory in the past is to divide cost of goods sold by the average inventory at cost. This ratio is known as the "inventory turnover." An average inventory figure is required, as with all turnover computations, because the sales have been generated over a period of time and the amount of investment involved might have changed during the period. The most desirable average would be one calculated on a monthly basis to take into consideration seasonal fluctuations, but often a simple average of beginning and ending inventory is all that is available. It should be noted that cost of sales rather than sales is used to avoid the influence of the markup on the turnover rate. If the business is one of those in which inventory is expressed on the basis of retail price rather than cost, or a cost of sales figure is not available, then the net sales figure should be used.

If, in the above situation where inventory amounted to 80 per cent of total current assets, its turnover amounted to 4 to 1 during the immediately preceding operating period, the heavy proportionate investment in

inventory would not be as unsatisfactory as it initially appeared. If there were no reason to expect a marked change in sales during the subsequent period, a complete liquidation of the inventory value could be counted on in 3 months' time. Or, viewed in other terms, coverage of the value of current claims could be achieved from inventory liquidation alone in 1¼ months. Since such interpretation ignores the element of profit obtainable in conversion, it errs on the conservative side, if anything.

There are two cautions that must be observed in this analysis. The turnover figure is an average and as such its use is subject to the rules of representativeness applicable to the use of every average. If the business is highly seasonal, for example, the particular interpretations illustrated above would be inapplicable or at least subject to substantial adjustment. Also, the method of inventory valuation must be noted and its influence taken into consideration. Should the last-in, first-out (LIFO) method of costing be followed, the turnover rate would vary from what it would be under first-in, first-out (FIFO). It should be realized, too, that for some purposes the inventory turnover is used as a measure of operating efficiency rather than specific liquidity. Under such circumstances interpretation is necessarily dependent upon comparison with an industry or historical standard.

At times there might be need for testing the specific liquidity of the receivables, as in a case where the quick ratio is 1 to 1 but 50 per cent of the quick assets is in the form of receivables. The most satisfactory method for investigating this quality of the receivables is to check the ledger record directly and classify the various accounts represented as to their maturity and past paying record. In this way the analysis can largely be taken out of the realm of conjecture and a specific knowledge of delinquencies, average liquidation period, and past credit and collection policies obtained. For many analytical purposes, however, access to the ledger is not feasible, and in such cases reliance must be placed upon an approximation of liquidity. Here again the turnover device is used. By dividing credit sales for a period by the average value of receivables outstanding a "receivables turnover" figure is obtained which might be interpreted in much the same way as the inventory turnover. The higher the rate, the more liquid the asset, and the more favorable the short-term position. Sometimes it is convenient to divide this turnover rate into 360 to show the *average number of days' credit sales outstanding*. This latter figure may, of course, be calculated directly by dividing total credit sales by 360 and then dividing this quotient into the receivables outstanding. Where the credit policies of a company are rather well established and stable and a credit sales figure is not obtainable, then a useful figure

for comparative purposes is one which relates the average receivables figure to net sales rather than credit sales.

Although, as explained above, the technical solvency of a business depends upon the specific maturity of the individual claims as well as the specific liquidity of the assets, there are hardly any reliable devices by which an outsider might check this factor of specific maturity. In some cases of relatively stable businesses a useful approximation to the maturity of its Accounts Payable may be made by dividing the average value of accounts payable outstanding into Purchases or Cost of Goods Sold. The resulting quotient is in the nature of a turnover figure and estimates the rapidity with which the accounts mature on the average in a year's time.

But except for this one ratio, the most that can be done to judge the specific maturity of the various liabilities is to presume the degree of urgency on the basis of location in the balance sheet and the name given. Accrued Taxes on a December 31 statement, for example, would not ordinarily be a very immediate claim. The maturing installment payment on a long-term serial bond or a term loan may be very distant in the year and can often be determined by reference to the provisions of the original loan contract. The Miscellaneous Unsecured Loans carried at the bottom of the current liability section would probably represent credits extended by officers, friends, associates, etc., and could probably be extended or subordinated by agreement with the lenders. Notes and Accounts Payable will most often be falling due sometime within the following three-month period. For many purposes a direct statement of the due dates of the Notes and Accounts Payable may be available. Where this is not the case, a helpful approximation might be gained by determining the customary trade terms for the industry and by securing credit reports from specialized credit agencies.

A qualifying passage needs to be inserted at this point. Up to now the approach has been developed from the standpoint of testing for technical solvency on the basis of the conditions that did prevail as of a given date. For new financing purposes, however, the real interest is in what that condition would become if the new financing were accomplished. A banker contemplating extending a loan to a concern is not interested in what the current ratio is but what it will be if he grants the credit, for his claim then becomes one of the maturities that must be met. The expansion of inventory on the basis of a bank loan may be the very act that destroys an otherwise sound short-term financial condition. This possibility will largely depend upon the size of the loan in relation to the concern's working capital.

Working capital was established in the preceding chapter as meaning that portion of the current assets financed by long-term means (fixed debt

and net worth).[1] It may be calculated by merely subtracting the current liabilities from the current assets. As such, it is a measure of size and has no bearing on the near-term liquidity or technical solvency of the business; its real significance lies in its representation of a method of financing. However, in connection with new financing, as suggested above, it does govern the condition that would prevail should a new loan be acquired. Two businesses in search of a $10,000 loan might each have a 3 to 1 current ratio. One, however, might have a working capital of $30,000, the other of $10,000. Should the loans be granted, the first company would still have a current ratio of 2⅕ to 1, whereas the other would have a ratio of 1⅔ to 1. Note that in each case the ratio declined because although assets and liabilities were increased by the same amount the percentage change was different owing to the different bases. Also the ratio for the second company declined the most because its borrowing base—its working capital—was substantially less. In the same way the other tests discussed above would be similarly affected. For credit purposes, therefore, it is essential that the analysis proceed on the assumption that the loan is granted.

From all the material that has preceded it should be clear that the real problem in judging a business's short-term financial position is to ascertain as closely as possible the future cash-generating ability of the business in relation to the claims upon cash that will have to be met within the near future. The inventory and receivables turnover analyses are partial tests along this line. It matters not what condition prevails at a given time; the important thing is whether the business in performing its regular operating functions can continue to generate cash in sufficient quantity and in satisfactory time to meet all operating and financial obligations. Knowledge of the adequacy of a company's short-term position, therefore, ultimately is based upon some recognition of the future flow of funds. Because of this fact some credit agencies and financial executives require a form of cash budget or cash-flow statement in support of the customary financial statement data.

In lieu of reliable budgetary information, it is possible in some cases to approximate the future cash position of a business on the basis of information provided by past financial statements. The first step is to convert the most recent annual sales figure to an average monthly or daily basis. Next all *cash* operating expenses are similarly expressed on a corresponding average monthly or daily basis. The difference between these two figures represents the amount of cash that is likely to be generated each month or each day in the following period on the average. By dividing these figures, in turn, into the current liabilities outstanding,

[1] See footnote, p. 111.

an approximation to the length of time it will take to pay off these claims may be obtained. Sometimes, concern is with only particular debts such as the accounts payable, and the period required for liquidating these is all that will be determined.

Since the underlying principle is fundamental to the estimation of a business's technical solvency, it is well to illustrate the method with figures, even though we shall find it is largely restricted in practice to the analysis of small business. Let us take the facts from an actual merchandising situation (see Table 1). The unfavorable short-term position of the business as evidenced by some of the conventional balance-sheet analyses discussed above has been brought about by an expansion

Table 1

Financial Statements of Haberdasher X

Balance Sheet at End of Year

Assets

	Cost	*Depr.*	*Net*
Current assets:			
Cash			$ 8,000
Receivables			1,500
Inventories			20,000
Total			$29,500
Fixed assets:			
Furniture and fixtures	$19,100	$3,100	$16,000
Leasehold improvements	20,600	.....	20,600
Air conditioning	5,500	.....	5,500
Totals	$45,200	$3,100	$42,100
Deposit—electric sign			800
Total assets			$72,400

Liabilities and Net Worth

Current liabilities:	
A/Co. pay—mdse.	$ 3,000
A/Co. pay—contractor	3,800
Accrued expense	600
Bank loan	3,000
Misc. unsecured loans	10,000
Total	$20,400
Net worth:	
Capital	$44,600
Profit for year	11,000
Total	$55,600
Drawings	3,600
	$52,000
Total liabilities and net worth	$72,400

Profit and Loss Statement for Year

Sales		$98,000
Cost of goods sold:		
Inventory, beginning	$ 7,000	
Purchases	75,700	
Total	$82,700	
Inventory, ending	20,000	62,700
Gross profit		$35,300
Expenses:		
Salaries (other than owner)	$5,250	
Rent	7,800	
Sales tax	2,250	
Depreciation	450	
Other expenses	8,550	24,300
Net profit		$11,000

program financed largely out of working capital (*i.e.*, current assets have been converted into fixed, and current liabilities have been expanded). The question is whether such improvident financing has crippled the financial status of the concern beyond repair, has created a situation which may be relieved, but only after unprofitable and painstaking efforts, or has simply imposed a serious burden which may gradually be relieved by continued operation and consequent generation of cash.

If the sales figure be divided by 12, the average monthly gross intake of cash is seen to be $8,167. The sales figure is considered wholly in the form of cash because even though some sales are made on credit, the assumption is that, with a reasonably stable business, collections on past credit sales will just about equal the amount of current credit sales. The total cash requirement for the year, as explained below, is $27,450, and the average monthly need is $2,288. Thus there is a monthly cash availability for debt retirement of $5,879.

Several points need to be explained in connection with the $27,450 expense figure. Since the company has access to trade terms of 3/10 E.O.M.; 2/30 E.O.M.; *n*/60 E.O.M.,[2] the question is whether or not the existing debts can be paid off in the time provided by the trade credit period. Therefore, cost of sales is not considered a cash expense for the purpose of the immediate analysis, for cash outlays on current purchases will be deferred in following the standard business practice of paying old debts first. Granted that the process results in the substitution of one debt for another, if the cash flow so measured is adequate, a means is provided for gradual reduction of the over-all debt burden. Second, since depreciation is not a cash expense, it should not be included in the aggregate expense figure. And finally, since the business is a small single proprietorship, the drawings should be viewed as necessary to support the personal expenditures of the owner-manager and therefore a definite cash drain.

By dividing the average monthly cash availability figure of $5,879 into the total current liability figure of $20,400, a quotient of 3.47 is obtained which indicates the number of months required to realize complete liquidation of existing debts. On the basis of the credit terms available, such a settlement could be achieved only at the cost of becoming a slow payer and a consequent sacrifice of credit standing. If the claims represented by the Miscellaneous Unsecured Loans account are not as urgent as the others, satisfaction of the remaining $10,400 sum could be realized in 1.77 months. Although such a schedule would avoid the stigma of

[2] E.O.M. in credit terms stands for "end of month"; therefore 3/10 E.O.M. means a 3 per cent discount will be allowed if the bill is paid by the tenth day following the end of the month in which the purchase is made.

delinquency, a sacrifice of valuable cash discount would have to be accepted nonetheless.

In some cases the cash position of a business is strong enough to permit a partial reduction of the outstanding claims without sacrificing regular operating needs. Determination of the availability of such excess cash on hand is at best arbitrary, but there are some useful methods of approximation. One is to base the minimum cash requirement on the average monthly cash expenditure. In the problem at hand, this would mean that roughly $3,000 is the *minimum* below which the cash account should not fall on the average. If $4,000 be used as a conservative estimate of the amount of cash that should normally be kept on hand, then $4,000 ($8,000 – $4,000) might be considered available for liquidation purposes. By subtracting it from the two debt figures of $20,400 and $10,400 we have the minimum amount which must be serviced out of future cash flow. By dividing these remainders of $16,400 and $6,400 in turn by the $5,879 figure we are able to determine that complete liquidation will require 2.79 months in the first case and 1.09 months in the other.

From any standpoint the results are not very favorable. Under the last assumption technical solvency can clearly be protected by making use of some of the credit period available. But since the Cost of Goods Sold figure in the profit statement is after allowance for the maximum 3 per cent cash discount, any change in policy with respect to discounting bills will react unfavorably upon net profit results. Unless the management can successfully convert some of its current indebtedness to fixed or intermediate form, the current position of the company must be judged strained. This does not mean that technical insolvency or dissolution is likely to follow, but it does suggest that unless the business volume increases substantially the concern is likely to become a slow payer and its credit reputation will suffer accordingly.

It is important to recognize that this technique for testing the near-term liquidity of a business is largely limited to small-scale merchandising and personal service operations with relatively stable conditions. The reasons for these requirements should be clear. Larger business will generally offer difficulties from the standpoint that they often engage in selling on credit, and variations in the proportion of cash and credit sales as well as in collections on account will confuse the analysis. Also, larger business will tend to have a large number of different suppliers with differing trade terms, so that the simplified assumptions underlying the approach do not hold. Manufacturing operations are often excluded because Cost of Sales consists largely of direct labor and manufacturing expense rather than just materials and the details of the Cost of Goods Manufactured statement are not always available. When the Purchase figure is sepa-

rately stated, however, the analysis may be used, provided the other requirements hold. Stable operations are required, as explained earlier, because the analysis relies upon average daily and average monthly figures, which, to be applicable, must be reasonably representative.

On the other hand, it should be equally clear that the approach and reasoning involved in this analysis are fundamentally sound and generally applicable for certain purposes. At times the net free cash-generating ability of a business is important as well as the profit performance. To determine such a figure all noncash charges to profit and loss should be added back to the Net Profit. Principal noncash charges generally found are Depreciation, Amortization of Bond Discount (and other Deferred Charges), Inventory Loss, etc. Should a business have an installment on its long-term debt falling due within the next year, for example, or if an expansion program calling for a substantial outlay of funds in the next year is contemplated, reference to this total figure would help in showing what part of the funds needed for such purposes would be likely to be made available by operations. Some businesses operate for extended periods of time at a loss and yet are able to meet fixed interest charges on debt without handicapping the cash position because the depreciation charge is greater than the loss and interest charge combined.

Conventional Analysis for Judging Long-term Financial Condition

The long-term financial condition of a business, as opposed to the short-term, is unavoidably related to its operating performance. Any thorough analysis of the long-term condition, therefore, must involve a study of profitability as well as solvency. In essence the task is one of judging the ability of the ordinary cash flow to carry, service, and eventually retire outstanding claims and at the same time provide a basis for justifying new financing help in the future. Clearly, there is need to relate the information contained in the two statements; but at the same time there are certain means of judging the character of the financial burdens portrayed by the balance sheet, and these are spoken of as constituting the balance-sheet analysis. In other words, there are two aspects of the long-term financial condition of a business. One is the matter of burdens imposed by past financial activities, the other is the earning power or operating performance of the business. Analysis of the first requires primary attention to the balance sheet; analysis of the second is primarily based upon the profit and loss statement. The present material is concerned only with the balance-sheet approach; techniques for investigating the other will be considered in the following chapter.

The burdens imposed by past financial activities may result from either asset policy or financing policy. That is to say, if the burdens are excessive, the cause may be either overcapitalization or improper financing. The term "overcapitalization" generally suggests the placing of a value on the capitalization of a business (long-term debt plus all direct contributions of owners) in excess of the real value of the assets. This would occur, for example, when good will is stated at an excessive figure or stock is issued in exchange for property whose value is grossly overstated on the balance sheet. "Real value," however, is an obscure and elusive concept; and if too much money is tied up in the business, even though the assets acquired are valued at real cost, there is effective overcapitalization of the business.

Means of testing the adequacy of a company's asset policy rely upon the turnover device. The "plant turnover," for example, relates net sales to average *gross* fixed property, which would include the real estate and furniture and fixtures of a mercantile business and the plant and equipment of a manufacturer (the so-called "brick and mortar" assets). This is one of the principal ratios that carries no meaning in and of itself; its interpretation depends upon comparison with an accepted standard, generally an industry average. This fact explains the need for using the gross figure in the denominator rather than the net figure after depreciation—variation in performance otherwise might well measure difference in depreciation policy rather than relative efficiency in the utilization of the asset.

Comparison with an industry standard, however, does not assure proper interpretation. Ordinarily a deficient turnover is looked upon as evidence of excessive asset investment. It may result from an inadequate investment in assets, on the other hand, that is reflected in deficient sales. The turnover test is merely one of general efficiency, and precise conclusion as to the cause of variation from the standard does not automatically follow. But be this as it may, the effect of a deficient turnover on the financial strength of a business is the same regardless of the cause.

A similar test of efficiency in the utilization of asset commitments is the "operating asset turnover," which divides the average investment in total operating assets over the year into the net sales figure for the year. Since this ratio bears heavily upon the over-all earning power of the business, as will be discussed later, its interpretation is not dependent upon comparison with an industry standard in every case. It has meaning in relation to the operating profit margin and to past performance within the business itself. *When comparison is not to be made with an industry figure,* intangibles paid for may be included in the asset figure and the net fixed asset figure after depreciation should be used rather than the gross

figure, as in the case of the plant turnover. The reason for this use of the net figure is that the depreciation on plant has been offset by the retention of income which has been reinvested in the business in some other form. Although such treatment would ordinarily result in a constantly increasing ratio, use of the gross figure will probably contribute to the realization of a constantly decreasing one and in choosing between the two possibilities the former is to be favored. *When comparison is to be made with an industry standard,* however, the net fixed asset figure may be used but all intangibles must be excluded. Since conditions and viewpoints differ substantially between companies with respect to the showing of intangibles on the balance sheet, their inclusion is very likely to obstruct clear and meaningful interpretation.

Another test of asset policy that may be revealing is the ratio of depreciation reserve to gross plant. This indicates the extent to which the fixed properties have been written off in the past. Again, however, interpretation depends heavily upon the use of allied information. If the ratio is large while the annual depreciation charge has been either normal or low, then it suggests that the fixed assets are old, with the possible consequence of developing an inferior competitive position or heavy replacement outlays. If, on the other hand, the high ratio is supported by unusually high annual increments to the reserve, the fixed assets cannot be judged deficient; to the contrary, there is a likelihood that future book profits will be higher because of the accelerated recovery of principal in the past. Of course, any suggestion from the ratio as to the condition of the fixed properties can often be checked by reference to nonaccounting information as to past plant replacement and acquisitions. The test is merely a crude one to be used by outside interests making an initial investigation into the company's position.

One method for judging the soundness of the actual financing used in the past is to convert the capital structure into percentage form. By "capital structure" is meant the total composition of the long-term methods of financing, including long-term debt, and all forms of ownership claims, such as stock and surplus. By dividing each component value by the total the capital structure proportions may be ascertained. Although this analysis does not highlight the financial burdens as such, their probable severity can often be presumed from the very make-up of the capital structure. Another device that is often used for determining the same general information is the ratio of "fixed debt to net worth." But although this latter measures the importance of debt to the total capital structure, it does not give a breakdown of the equity means of financing, which information is sometimes significant in itself.

Since the use of debt carries with it two principal dangers—recurring fixed charge and principal maturity—a top-heavy structure (one with a preponderance of funded debt) suggests an overburdened long-term financial condition. At the same time a complicated capital structure (one with a substantial amount of different securities outstanding) suggests limited availability to new financing in the future. A very simplified structure, on the other hand, may indicate unnecessary dilution of owners' interest, if the capital stock account is the dominant factor, or a poor dividend-paying record, if surplus looms large.

Clearly any of these conclusions are at best tenuous on the basis of the supporting material, and further tests would be required to substantiate the initial hypotheses formed. In the case of the supposition of an oversevere fixed charge burden because of excessive recourse to fixed debt in the past there is available a very meaningful ratio known as the "interest coverage" test or the "times interest earned" test. In this analysis the income before interest expense but after taxes is divided by the interest figure.[3] That is to say, the interest figure need only be added back to the net profit and the sum then divided by the interest expense. Interpretation thus rests on the element of safety contained in the coverage. If a business has a difficult time maintaining a suitable coverage over a given period of years, then the investigator has tangible evidence to support his original suspicion of excessive burden. Whether or not a particular coverage is "suitable" cannot be judged by any rigid standard, however; it will have to depend upon the judgment of the analyst, who should take into consideration the stability of the company's operations, the representativeness of the years covered by the test so far as market rates of interest and general business conditions are concerned, the prospects of future earnings, and the purpose of the analysis—particularly whether or not new financing is being contemplated.

Where the coverage test is being employed to judge the desirability of financing contemplated expansion with a long-term debt type, the interest expense to be incurred from the new financing should be added to the expense of the past before making the calculation. This approach might appear oversevere in that it does not allow for inclusion of anticipated earnings from the expansion; but if this fact is borne in mind in judging the adequacy of the coverage, the test should be indicative none-

[3] Although interest is allowed as a deduction in calculating income subject to tax, the income after tax figure is most useful in judging coverage because from the owners' standpoint that is the amount available for meeting the interest charge. However, this is a moot point among financial analysts. The important thing to be realized is that it does not matter which income figure is used so long as there is consistency in use and recognition of the implications involved.

theless. Sometimes, too, different income figures might be used as the numerator, depending upon the particular purpose and viewpoint of the analyst. Some financial services compute the coverage in two and even three different ways: as given above, with income before taxes, and with income before taxes and depreciation and other noncash charges.

With more complicated capital structures it is also desirable in some cases to compute the coverage of both interest and preferred dividends. In such a case, the income after taxes but before interest is divided by the sum of the interest and preferred dividends combined. To divide each payment in turn by the income available would not give an accurate measure of *over-all* coverage of such prior claims to income. For example, if the interest is $10,000 and preferred dividends amount to $10,000, with an income of $30,000 coverage would equal 1½ times. But if the coverage were computed in sequence, interest would be shown to be covered 3 times and the preferred dividends 2 times.

In judging the burdens imposed by the past financing of a business it is not only important to determine the severity of the resulting fixed charges and maturity payments; the effect upon the availability of future financing may also be highly significant. For example, if current debt looms large as a method of financing at the present time, the prospects of its being available for still greater use in the future is slight, except possibly under very disadvantageous terms. Similarly, present reliance upon heavy fixed indebtedness specifically decreases the opportunity for additional use of this financing means. The capital structure proportions, of course, throw light upon this matter of future financing avenues, but there are also some specific ratios that have precise bearing upon it. In the first place is the ratio of total debt to total tangible assets. Then there is the ratio of fixed debt to net fixed assets. The higher each of these ratios is, the more limited for future use is the method of financing represented in the numerator.

Importance of Comparative Analysis

Until now concern has been with ratio analysis of a single balance sheet in order to lay emphasis upon the interpretations of the relationships expressed. To provide thoroughness to any analysis of financial condition, however, a study of the record over a period of 10 or more years is essential. This is achieved by determining the changes in the annual balance sheet over the period as well as by comparing some of the more meaningful ratios by years in order to try to detect significant movements or trends. To begin with, significant change in the aggregate amount of funds employed (total assets) should be determined, for this in turn

bears heavily upon other considerations. Rapidity of growth, for example, is looked upon as a healthy sign because it suggests that the business has been well received and enjoys a strong economic position. Also, the more rapid the growth, the more justifiable is a complicated capital structure. Conversely, a relatively weak growth experience is often evidence of a weak economic position and therefore an argument against any financing which involves a fixed contractual obligation of one sort or another.

Changes in aggregate values, however, must be accompanied by corresponding changes in the individual components for these interpretations to hold. It is just as important that the separate asset items be kept in balance with one another as it is that the aggregate investment show healthy signs. A very worth-while test in this regard is to trace the percentage make-up of the total assets over the period covered. The current, fixed, and miscellaneous asset totals may be related to one another, and then the current asset composition may be studied alone on an annual comparative basis. The point is too often overlooked that for an expansion in fixed assets to prove worth while a corresponding expansion of current assets is required. Without such "working" assets actually to provide the revenue required to justify a fixed commitment, an otherwise sound plant expansion might become redundant and financially oppressive. Therefore, whenever a consistent or unusual change in asset proportions is noted, special investigation is called for to the end of making suitable explanation. In the case of current asset composition in particular such a change may merely be the result of change in managerial policy (such as more lenient credit terms, producing more for inventory, etc.), but be that as it may a satisfactory explanation of this sort must be reasonably supported before the change is ignored.

One of the most valuable aspects of comparative analysis is the support it gives to the interpretation of financial condition, be it short- or long-term. The point was made earlier that effective use of ratios is largely dependent upon comparison with standards and that one of the most valuable standards for this purpose is historical record. A business whose cash, current ratio, and quick ratio are consistently declining would not be looked on with very great favor unless it could be shown that the liquid position of the company in the past was excessive and the noted change has been brought on by conscious management effort. Also, it is most difficult to judge the suitability of a plant turnover figure in itself, but if there has been a noticeable decrease over time, a caution sign is raised and should be ignored only if there is an off-setting change in profit margin brought on by a change in line of product. Comparative analysis, in other words, gives the analyst the benefit of historical perspective in

judging a situation and therefore goes hand in hand with the historical flow-of-funds analysis covered in Chapter 5. It also may provide him with an evidence of trend which can be counted on to some extent to influence the future condition.

Concluding Remarks

We have seen that the balance sheet is a formal summarization of the balances in the real accounts of a business's ledger as of a given date. As such it presents in a more or less complete form the uses to which the funds of the business have been put at that time and the financing methods that have been used. From such a portrayal of financial position it is possible to pass judgment upon the probable future financial condition of the company provided careful attention is devoted to those changes which might reasonably be expected to occur subsequently.

There are, in fact, two aspects of a business's financial condition which require separate consideration: the short-term (or near-term technical solvency) and the long-term. A given balance sheet would seem to give evidence of a sound short-term condition if the specific liquidity (nearness to cash) of the individual assets were more than adequate to meet the maturing claims of the current debts. Because conditions may change rapidly following the date on which the statement is drawn, however, reliance upon the balance sheet in this regard requires the availability of a recent balance sheet and one which is reasonably representative of conditions to follow. In the absence of this latter requirement, supporting material in the form of a projected cash statement—a cash budget—should be provided. In any case, recourse to ratio analysis is essential in order to make the most of the information available.

Judging the long-term condition of a company requires determining the nature and extent of the financial burdens imposed by past financial policy. Again concern is with the accomplished fact only as it bears upon the future, but change is much slower in this case than in that of the short-term condition, and so conclusions drawn from the given statements are less subject to qualifications. The two factors which particularly govern these burdens are the past policy with regard to investment in assets and the type of financing used. Testing the effect of each depends upon the ratio technique, but in essence the approach is one of relating the operating and cash-generating ability of the business to the burdens. In fact, this approach may serve to illustrate the philosophy or attitude that must underlie all balance-sheet analysis: the objective is not to dissect the financial members of the business in a static, dormant sense as though it were a corpse but to try to understand the vital, living, organic

health of the business and its ability to maintain a satisfactory financial position. The analyst, from any viewpoint, is interested in the business as a going concern—with its physiology, not its anatomy. That is why to accomplish the utmost in balance-sheet analysis comparative analysis over a suitably long period of time is imperative.

Questions

1. For what purposes is the balance sheet used in financial analysis?
2. Upon what assumptions is reliance upon balance-sheet information dependent when used for these purposes?
3. Why is it essential in this connection that the balance sheet be regarded as a continuing statement, to use the wording of the National Association of Credit Men?
4. What is a ratio?
5. Of what use is ratio analysis? What cautions apply to its use?
6. What are some examples of ratios that are useful in the judging of (*a*) technical solvency and (*b*) long-term financial condition?
7. In what way do these ratios further understanding of the situation tested?
8. Explain fully the reasoning behind the statement that financial analysis is merely intended to fortify one's judgment and not provide an absolute answer.
9. What is the real significance of the term working capital or net working capital? What is its relationship to the current ratio analysis?
10. Explain how a company with a 4 to 1 current ratio could be less solvent technically than another one with an 0.8 to 1 current ratio.
11. Given the average turnover of inventory into cash and the average term of current liabilities, how might one approximate the average current ratio required?
12. What is the special value of comparative balance-sheet analysis as an analytical tool? What conditions are essential to its use?

Chapter 7. CONVENTIONAL ANALYSIS FOR JUDGING PROFITABILITY

Despite the approximate character of the accounting net profit as developed in Chapter 4 the information contained in the profit and loss statement is analyzed more or less as though it were exact. The assumptions underlying the determination of the periodic profit figure (depreciation, bad debts, accrued income and expenses, value of inventory, etc.), to be sure, are either accepted on the basis of the certification of a reputable accountant or determined and judged by the analyst himself. But once this preliminary investigation has been made, the profit and its supporting data are accepted at their face value and rather standard analytical techniques and methods are applied in evaluating them.

Again, as in the analysis of balance-sheet data, the principal technique for analysis is that of relating items having logical operational significance in regard to one another. This ratio analysis is also subject to the same cautions discussed at that time, namely: a ratio must have precise applicability to the case at hand; it does not prove anything in itself but merely supports the judgment of the analyst; and finally, it is most meaningful when compared with some established standard.

Earning Power

Meaning and Measurement

In judging the profitability of a business, initial concern is with its adequacy, commonly referred to as "earning power." This concept may be defined as the ability of a given investment to earn a return from its use. To measure such ability most effectively, it is necessary to compare the return realized with that of other businesses or with the same business in preceding periods. Therefore, it is necessary to express the return as a percentage of the investment involved so as to reduce the dollar figures to a common basis for comparison and a logical basis for interpretation.

The most important point of caution to be noted with respect to earning power percentages is that the investment figure used should be related only to its associated income figure. Either asset values or claims might serve to represent an investment. The more common values in this connection are total operating assets, total assets, total long-term investment,

total net worth, or equity, and total residual equity. The associated income figures are, respectively, net operating income, net profit, net income before interest but after taxes, net profit, and net profit minus any senior equity participation. The several relationships might be made clearer by listing the investment and income figures in parallel columns as follows:

Investment Figure	*Associated Income*
1. Total operating assets	1. Net operating income
2. Total assets	2. Net profit
3. Total long-term claims	3. Net income before interest and after taxes
4. Total owners' claims	4. Net profit
5. Residual owners' claims	5. Net profit minus senior equity participation (preferred dividends, etc.)

The asset items are used for earning power calculations by management and others when the desire is to judge the operating performance of the business unit as a whole. For this purpose the operating asset test is the most meaningful and the one most often used. The total asset test is valuable in judging the adequacy of the final results and, when used in conjunction with the earning power of the operating assets, may serve to accentuate the relative importance of the nonoperating items and the severity of the tax levies.

The earning power of the strictly investment claims is of primary concern to those long-term investors who have already bought into the company or are contemplating doing so. They will, of course, be interested in the over-all earning strength of the business itself; but since their welfare is governed by the additional factors of participation of other financing interests and inclusion of nonoperating income, they are mainly concerned with the particular return on their investment. Since the long-term creditors commonly receive a limited return, they are not vitally concerned with the return on total long-term investment except as it is related to the coverage test discussed in the last chapter for the purpose of judging safety. This rate of return, rather, is of major interest to the owners because of the potential factor of leverage, to be discussed shortly.

Since the income figures used represent accumulations over a period of time, the investment figure should ideally represent the average amount employed during that time in realizing the income. A simple average of

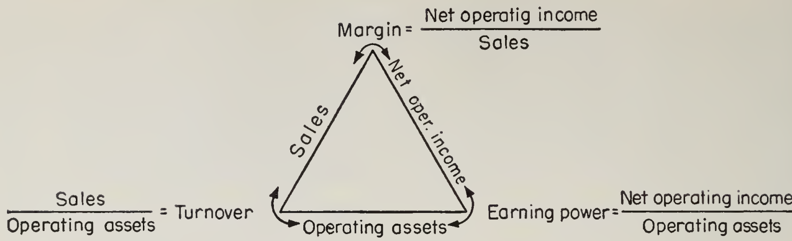
the beginning and ending values is generally adequate for the purpose. Often the beginning value is used in place of an average figure, and in cases where there has been little or no fluctuation in the investment, this method is to be desired because of its greater simplicity. Sometimes when the initial balance sheet is lacking and it seems reasonable to assume little change during the year, a substantially satisfactory calculation can be had by using the year-end balance sheet to approximate the amount invested.

It should be noted that, in testing the return on ownership, income taxes should be excluded from the profit figure. The government enjoys, in effect, the equivalent of a substantial investment in American business as a result of this tax levy. Furthermore, its participation in the income is compulsory and prior to that of the owners. "Net profit before income taxes" has no meaning so far as the owners are concerned. There is no profit available to the owners until after the tax has been paid.

For the purpose of economic analysis of the business as a whole, however, "earnings before taxes" is a more uniform and meaningful figure. Since the business income tax applies only to corporations and varies somewhat with the size of income, in comparing operations conducted under different legal forms of organization or in comparing the results of a small and large business, income before taxes gives a more comparative picture.

Contributing Factors

Earlier discussions of the circuit flow of funds in business have established the point that the earning power of any investment depends upon the rapidity of its turnover and the operating profit margin realized. That is, the earning power is a product of these two factors, and therefore optimum results can be attained only by maximizing each. In technical terms the combination is known as the "triangular relationship." Its significance exists not in its use as an analytical tool, for the earning power ratio can be calculated directly from the specific earning and investment figures. It is useful, however, in describing the two basic forces bearing upon ultimate results and therefore establishes the areas of business operation which must be properly controlled if desired results are to be realized, namely, the proper commitment of funds to earning assets and the control of current operations as represented by current receipts and expenditures. Furthermore, it symbolizes the bearing of cash flow on ultimate performance: cash is invested in earning assets which are used to generate income from which a net profit is expected to remain. In this symbolic form it could be shown as follows:



In equation form it would be expressed as:

$$\frac{\text{Sales}}{\text{Operating assets}} \times \frac{\text{net operating income}}{\text{sales}} = \frac{\text{net operating income}}{\text{operating assets}}$$
$$= \text{earning power}$$

To illustrate the actual application of these relationships with figures taken from a simplified business situation, we might refer back to the small haberdasher's financial statement carried in the preceding chapter. The only adjustments we need to make are to assume that the assets have not been altered in amount during the preceding year and that the owner's drawings are a fair measure of his own salary cost. We would then have a net profit of \$7,400, which when related to the total asset value of \$72,400 would give an earning power rate of 10.2 per cent. By substituting the appropriate values in the above illustration the separate contributions of the two factors, turnover and margin, may be shown. For example,

$$\frac{\text{Sales}}{\text{Assets}} \text{ (turnover)} = \frac{98{,}000}{72{,}400}, \text{ or } 1.35$$

and

$$\frac{\text{Profit}}{\text{Sales}} \text{ (margin)} = \frac{7{,}400}{98{,}000}, \text{ or } 0.076$$

Multiplying these two results together, we arrive at the same earning power figure of 10.2 per cent shown above.

The reason for using the operating asset figure in these illustrations rather than one of the precise investment claims is to emphasize the factors governing the earning strength of the business unit as a whole. The individual investor groups that provide the funds for the acquisition of the assets will, of course, share in the fortunes of the whole business unit; but, as indicated above, their participation comes only after the adjustment for other nonoperating items. Consequently, the earning power of the component investments is similarly governed by a comparable triangular relationship, but the net income figure used in each case differs.

leverage defined

The return on residual equity, however, may be influenced by a separate factor of its own: the leverage contained in the capital structure. "Capital structure leverage" is the pressure exerted on the earnings of the residual equity interest as a result of trading on this equity. That is to say, when total asset requirements are financed partly with funds bearing a limited return (debt, preferred stock, etc.), there is a likelihood that the rate earned on the residual equity investment will differ from that earned on the total investment. The reason is that this latter will probably vary from that contracted to be paid on the limited participating part. The full return to the residual equity group will therefore depend upon the size of this variation and the direction—whether it is plus or minus.

The point might be illustrated by use of some hypothetical figures. Suppose, for example, a business, all the assets of which are operating, has been financed by 20 per cent debt and 80 per cent equity in the one case and 50 per cent debt and 50 per cent equity in the other. Suppose, further, that return on total investment after income taxes amounts to 9 per cent and that the borrowed funds have been acquired at an average rate of 5 per cent. In the first case, debt is equal to only 25 per cent of equity so that the differential between the rate earned and the rate paid on debt of 4 per cent raises the return to the equity interest by 1 per cent. That is, the leverage factor in the net return to equity is equal to 1 per cent, and the operating factor is equal to 9 per cent, giving a total return of 10 per cent. In the other case, however, debt amounts to 100 per cent of equity, and therefore the full-rate differential accrues to the benefit of the equity group, and its return is equal to 13 per cent. The equity interest, in other words, has profited in each case from borrowing money at a fixed rate and investing it in the business at a higher rate of return. But in one case debt was relied on more heavily, and the beneficial effect of such financing was greater to a corresponding degree. To illustrate these cases in arithmetic form the following material may be assumed:

Item	Capital structures		Distribution of earnings		Per cent earned	
	Case A	Case B	Case A	Case B	Case A	Case B
Debt	$ 20,000	$ 50,000	$1,000	$2,500	5	5
Equity	80,000	50,000	8,000	6,500	10	13
Total	$100,000	$100,000	$9,000	$9,000	9	9

In the light of this illustrative material it becomes clear that the strength of the pressure exerted by leverage in the capital structure on the rate of return of the residual equity interest is dependent upon two conditions. One is the amount of differential existing between the rate earned on total investment and the rate contracted to be paid on the limited participating part. The other is the extent to which there is trading on equity. The greater the spread and the greater the equity trading, the greater the leverage factor in the net result. One point must be emphasized in view of the nature of the illustrative material. Leverage operates equally in both directions. Although the figures used above result in an advantage to the equity group, had the differential been negative rather than positive the owners would have suffered in identical fashion.

The question often arises as to why the claims of the current creditors should not also be included in the calculations of earning power on investment for the purpose of determining leverage. In general, they are omitted for three reasons:

1. Much of the investment of the current creditors is automatic debt, such as accruals and accounts payable, for which there is no share of income in the form of interest.

2. Such current debt as does receive interest often fluctuates so widely from seasonal factors that the amount shown in the balance sheet, if any, is not comparable with the interest expense.

3. Except in some small business the amount of interest-bearing current debt shown in the balance sheet is so small that its exclusion makes little difference in the percentage of earning power on total investment.

In keeping with these reasons, whenever interest-bearing debt is found among the current liabilities and appears to correspond reasonably with the interest charges found in the profit and loss statement, it is permissible to expand the measure of total investment to include such items.

One final point must be recognized in connection with earnings on residual equity investment. In a small business too much emphasis must not be placed on the reported net profit and rate of return on net worth if the owners charge the business salaries for their services. Net profit can be either inflated or deflated too easily by alteration of the owners' compensation. This point may not be realized by outsiders, and such persons may gain an overoptimistic or a too pessimistic view of the business's true worth. Unless the business is in such a strong financial position as to require little or no credit, it will ordinarily be well for it to exercise restraint in the matter of owners' salaries unless tax considerations make a reduced profit showing desirable.[1] If the tax consideration is

[1] Salaries of corporate officers, who may be owners, are an allowable deduction in computing net income for Federal income tax purposes. For that reason the Bureau

important, the owners may counterbalance the drain of such salaries by regular reinvestment that will build up the net worth and working capital in the same manner as reinvested profits. This reinvestment by the owners will show up in stronger balance-sheet ratios than the profit results alone would produce.

Operating Characteristics

For most analytical purposes it is not sufficient to know the adequacy of a business's earnings as represented by its earning power for a single year; other factors such as sources, uses, stability, and trends may be even more important. For management control purposes, in particular, constant attention will be given to the individual items of operating performance, for only through close day-to-day control of income and expenses can best possible end profit results be realized.

The most appropriate way to analyze the over-all operations of a business for purposes of this sort is to convert all the dollar figures in the profit and loss statement to a percentage of net sales. Ordinarily, the approach is from the general to the specific. First, the totals and subtotals are checked in this way, the most important ones being the *gross profit margin,* the *net operating income margin,* and the *net profit margin.* Then, if a discrepancy is brought to light, a more detailed checking of the individual items will follow in order to locate the cause of the deviation. For example, if net operating income margin is below expectations while gross profit margin is not, converting all the individual operating expenses into percentages of net sales will then point out the particular item or items which are not in line. Such analysis presumes, of course, the existence of some standard of performance, usually one based upon past results.

Were the income statement for General Foods Corporation illustrated in Chapter 4 expressed in percentage form, results would be as shown in Table 1. Analyzing a profit and loss statement in this way is particularly valuable on two scores. Again comparison is facilitated by the process. Since results are expressed as a proportion of the revenue dollar, it matters not what the particular dollar figures are—the important thing is the percentage composition. For this reason, operations of different businesses in the same industry can be compared, and operations of the same business during different periods can be compared. For the purpose of certain economic analyses, comparison of entirely different businesses

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of Internal Revenue reserves the right to review and reduce the deduction for any salaries which appear too large in view of the services performed. This rule still leaves room for some salary variations, however.

is even made possible because the item of gross revenue is common to all business operations. We shall find, for example, that different economic services involve different rates of utilization of assets and therefore require different margins of net income.

TABLE 1

GENERAL FOODS CORPORATION AND CONSOLIDATED SUBSIDIARIES

Statement of Earnings for the Year Ended March 31, 1951

(Values expressed as per cent of net sales)

Gross sales	107.8
Less allowances, outbound transportation, warehousing, and discounts	7.8
Net sales	100.0
Cost of goods sold	77.2
Gross profit on sales	22.8
Less selling, administrative, and general expense	14.2
Earnings from operations	8.6
Other income	0.5
Total income	9.1
Less interest expense	0.1
Earnings before income taxes	9.0
Provision for estimated income taxes	4.5
Net earnings	4.5
Less dividends on preferred stock	0.1
Earnings applicable to common stock	4.4
Dividends on common stock	2.2
Earnings retained in business	2.2

The other, and possibly more important, reason for employing the technique in analyzing the operations of a business is that it relies upon the basic circuit flow-of-funds concept and thereby provides the most logical means of interpreting performance. It could be argued that the operating items might be converted to a percentage of several possible bases for purposes of comparison, but they then would not be expressed in a way that had particular operational meaning. In the above example, on the other hand, we can understand that, in the process of generating revenue during the fiscal year 1951, 78.3 per cent of the amount realized (or 78.3 cents of every revenue dollar on the average) was merely repay-

ment for the amount spent on the goods sold. The reconversion of goods into cash, in other words, resulted in a net appreciation of only 21.7 per cent of the gross revenue. (Out of every dollar received, 21.7 cents on the average was available for expenses of operation and profit.) In order to generate these sales, however, and thereby reconvert the merchandise into cash, special labor, equipment costs, and managerial ability were required. These "conversion costs" consumed 13.6 per cent of the revenue realized, leaving 8.1 per cent as profit from operations.

The sequence of items in the profit and loss statement tends to leave the impression that income is realized and these expenses are charged against it. This, of course, is not in keeping with business operation. Actually, the costs are incurred in preparing for and making the sales. That is why miscellaneous noncash assets as well as an adequate operating cash fund are required in any business endeavor: cash is consumed prior to and in the process of realizing more cash.

From what was said in Chapter 4, however, it should be borne in mind that the profit and loss statement does not measure cash flow in the strictest sense. Many operating expenses, such as depreciation, bad debts, etc., are not strictly cash outlays during the period in which they are assigned. And to the extent that a business sells on account, all of its net sales is not strictly cash income. The profit and loss statement, therefore, cannot be used as a cash statement for the controlling of cash; its only purpose is to show profitability. But the essential reason for accounting for periodic profits on an accrual rather than a cash basis is to determine more accurately the current period's contribution to profit in the long-run sense, by which is meant the net cash remaining from the full circulatory process. Consequently, *interpretation* of profitability must proceed on the presumption that the figure shown is cash profit, even though in a strict sense it is not. Additional attention will be given to the inapplicability of profit and loss information to the control of cash when the subject of budgeting is considered.

On the basis of this discussion, the earlier description of the triangular relationship and its bearing upon earning power should be more thoroughly understood and more fully appreciated. The net operating income margin, by representing the net "cash" remaining from the circulatory process, must be related to the turnover of operating assets if earning power is to be understood. The amount of profit realized on every dollar of sales is insufficient in itself; the amount of funds needed to be employed regularly in order to generate the sales must also be taken into account. Some businesses, as has already been mentioned, require a substantial investment in assets to generate income; others are able to get along on much less. Where the amount of funds needed is comparatively

large, as in the case of utilities, the income margin must be correspondingly large. And where the turnover is rapid, as with merchandising concerns, the margin will tend to be reduced. This point can be illustrated by reference to Table 3, Chapter 1. Another way of expressing it is that those businesses which primarily require assets (capital) to generate revenue must in turn count on realizing substantial capital return (interest and profits) from each revenue dollar. This would particularly hold for public utilities and some manufacturing endeavors. On the other hand, those businesses, such as personal service and merchandising, which mainly rely on labor of one sort or another for generating the revenue will count upon only a small part of the revenue dollar for return to investment.

A very common test of operating performance which relies upon the percentage of net sales device is the "operating ratio." It relates the total operating costs (*i.e.*, cost of sales plus operating expenses) to the net sales figure. The difference between it and 100 per cent is, of course, the net operating income margin. For this reason, if a profit and loss statement has already been converted to a percentage basis as illustrated above, there is no need for the separate calculation of this ratio. Often, however, the operating ratio is chosen in preference to the margin when a single figure is desired to measure operating performance. When it is used in connection with the triangular relationship, it is necessary to note that its size will tend to vary directly with turnover of operating assets rather than inversely as with the margin figure.

Testing of Noncash Charges

Many times it is desirable to check the adequacy of the noncash charges before appraising the profitability of a business as shown in the published statements. In keeping with the above discussion, one means of doing this is by expressing them as a percentage of net sales. This method may be helpful if there is a satisfactory standard for comparison, but more often it is preferable to relate them to the cost of the assets on which they are based. Here, too, a suitable standard is to be desired, but often adequate judgment is possible merely by appraising the character of the business.

Though the term "depreciation" bears an engineering connotation, its principal purpose is financial in character: recovery of cost out of current income in order to preserve dollar principal. The major difficulty in establishing an adequate annual charge rests on the fact that the length of time over which a particular fixed asset will contribute to operations is not determinable in advance. In attempting to reach a satisfactory estimate along this line, mechanical or engineering methods are sometimes used. But since the life involved is economic rather than purely physical,

such mechanical methods are often hampered by inability to cope with the factor of obsolescence. It is for this reason that the simplified straight-line method is widely favored, not that this method accounts for obsolescence any better than others but because it is no worse a measure and therefore its relative ease of calculation tips the balance in its favor.

Consequently, if the business is one which is greatly subject to uncertainties, such as the manufacture of a novelty item, an activity subject to intense competition, or a process requiring highly specialized location and equipment, then principal investment in fixed assets should be recovered rapidly through a high depreciation charge. On the other hand, if the business is stable and well established, depreciation need conform only to the expectation of physical life, with only slight adjustment made for obsolescence. It is, of course, difficult for an outsider to be precise in his analysis of depreciation adequacy, but tests of the type mentioned can at least call attention to serious discrepancies.

The tone of the above discussion may suggest that the only purpose of the tests is to guard against overstatement of profit by maintaining the various noncash charges at too low a level. This is not so. In many cases it is just as important to recognize an understatement as an overstatement, and so the tests are useful in both respects. The same type of analysis, furthermore, can be applied to the bad debt expense, the other common noncash charge in the profit and loss statement.

Although the repairs and maintenance expenses are of a cash sort, it is well in some cases to check their adequacy along with that of depreciation. Judgment of the depreciation charge is thereby made more reliable. A low depreciation charge can be accepted so long as current maintenance is above average. But a low maintenance expense combined with a low allowance for depreciation suggests deterioration in operating performance in the future. Again there is no way of determining precisely whether or not the amount spent on repairs and maintenance is adequate, but converting the dollar amount to a percentage of gross plant or equipment and comparing the results with past performance or an industry standard will often provide some help in this regard. Similarly, relating it to net sale for comparative purposes will often prove revealing.

Stability, Uses, and Trends of Earnings

As with balance-sheet information, some of the most meaningful interpretation of profit and loss data rests upon comparative analysis over time. Profitability is not a condition that exists and can be measured for a limited period of time only; it is a variable thing like the temperature of

the human body. The determination of periodic net income by an accountant can even be likened to the temperature reading and pulse taking by a nurse. The present health and stamina of a business are recorded thereby, and the prospects for the future are to some extent defined. But the analyst in any capacity is interested in future profit prospects, both as to adequacy and reliability, and his principal means of determining these is by appraising the record of both the present and the past in the light of prevailing and prospective economic conditions.

To know that a business has been able to realize a 10 per cent return on total long-term investment during the immediately preceding year is one thing, but to know further that during the past 12 years a loss was realized in 5 of the years is quite something else. Too often the periodic accounting profit in itself is given unjustified weight by the interested public. The earlier discussion on accounting profit figures indicated that these interim results are nothing more than approximations of a temporary condition. If long-run results are to prove favorable to the point of maintaining the necessary capital investment, then the *average* annual return on investment must be adequate. This would mean that, in a business with fluctuating operations, periods of large profits must be realized in order to offset losses incurred during others and thereby provide an adequate performance over an extended length of time. However, such periodic fluctuation in operating performance is itself a source of uncertainty because of the strain it places upon the maintenance of solvency and should be recognized in any study of profitability.

To test for this factor of stability, the first procedure is to determine the annual earning power of a particular investment over a complete cycle of general business conditions—usually a period of 10 or 12 years is adequate. In order to check on operating performance more specifically, it is also well to compare the percentage breakdown of net sales over a comparable period of time. Such an analysis will generally highlight the points of vulnerability to fluctuating revenues by bringing into focus the particular cost rigidities of the business.

The student is probably already familiar with the variable vs. fixed costs principles of economic analysis. Just as the fixed costs involved in some forms of financing a business give rise to a leverage factor that influences the rate of return earned by the residual equity interests, so the fixed costs incurred in operating a business produce a comparable leverage effect upon the net profits in general. This "operating leverage," as it is known, may be illustrated by a simple arithmetic case.

Suppose the operating performance of a business be represented by the following figures:

Item	Dollars	Per cent
Sales	$100	100
Variable expenses	$ 60	60
Fixed expenses	30	30
Net profit	$ 10	10

Then we may say that the situation is one in which $30 is incurred as a fixed expense regardless of the amount of revenues generated or rate of business activity, and the other costs incurred vary with business volume in a ratio of 60 per cent. Whereas the variable expenses are directly related to business volume, the significance of the fixed costs varies in inverse relation to volume change. The larger the volume, the smaller the fixed cost burden and the higher the net profit; and vice versa, the smaller the volume, the larger the fixed cost burden and the smaller the profit. Sales in the above case, for example, would have to equal $75 before the business would be just breaking even. Sales below this point would result in losses, and increased sales would result in profits at a constantly increasing rate.

At any stage of output for any business, such as the $100 sales volume shown above, it is theoretically possible to express the operating leverage factor in terms of the percentage effect upon net profit results of any change in volume. For example, if we assume a 10 per cent drop in volume, then we can say profits will drop by 33⅓ per cent. Or if a 20 per cent rise in volume is contemplated, profits will be boosted by 50 per cent. These calculations might be explained by working through in detail the dollar and percentage changes as follows:

Item	10 per cent decline		20 per cent rise	
	Dollars	Per cent	Dollars	Per cent
Sales	$90	100	$120	100
Variable expenses	$54	60	$ 72	60
Fixed expenses	30	33⅓	30	25
Net profit	$ 6	6⅔	$ 18	15

A direct calculation of the effect of any volume change, on the other hand, may be made by substitution in the following equation:

$$\frac{\dfrac{\text{Per cent of volume change}}{\text{New volume/old volume}} \times \text{old fixed cost, per cent}}{\text{Old profit rate}} = \text{per cent of profit change}$$

In the case of the 20 per cent rise in volume, for example,

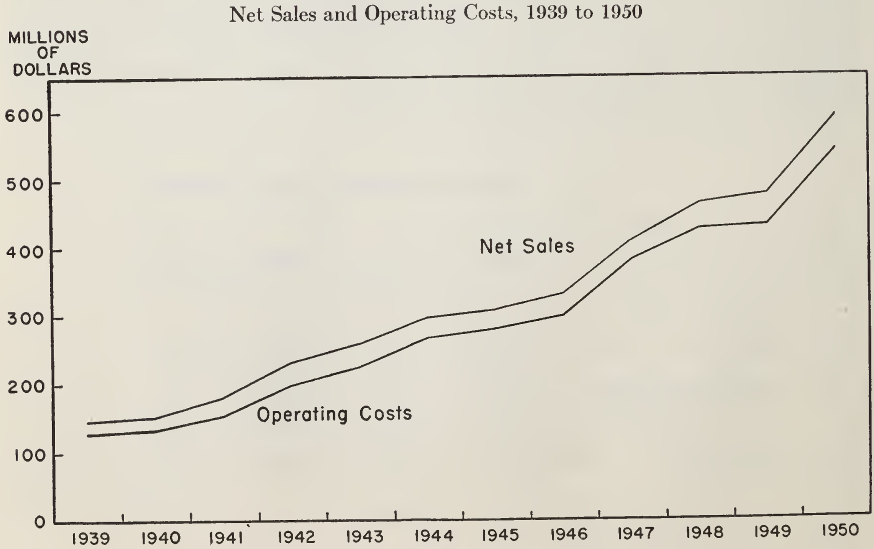
$$\frac{\dfrac{+0.20}{1.20} \times 0.30}{0.10} = \frac{1/6 \times 0.30}{0.10} = \frac{0.05}{0.10} = +50 \text{ per cent}$$

The whole purpose of this discussion on operating leverage is to establish the essentials of the concept involved and indicate the fundamental principles of the variable-fixed costs relationship as it bears upon operating performance. Contrary to capital structure leverage, the actual percentage contribution of the operating leverage to the final results cannot be calculated because of the practical difficulties involved in isolating specifically the fixed and variable costs. Furthermore, the situation will vary according to whether there is a slight or major change in volume. Some expenses are absolutely fixed in character, and others are only semifixed. Despite this inability to measure precisely the leverage

Exhibit I

General Foods Corporation

Net Sales and Operating Costs, 1939 to 1950



factor, recognition of its existence and general strength is nonetheless fundamental to a full appreciation of a business's profit stability.

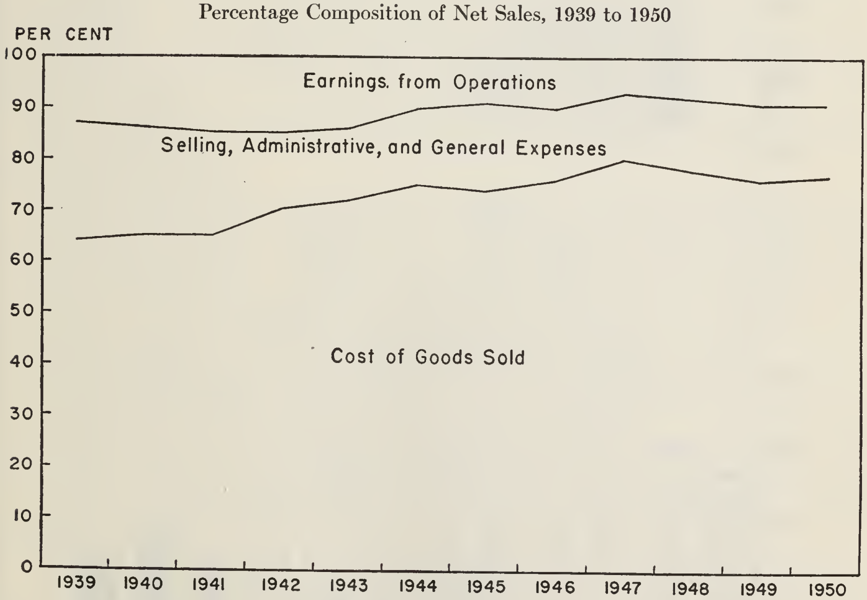
Because exact arithmetic calculations are not practical, graphic analysis lends itself very well to the study of stability. One of the most standard methods is to plot the annual sales and the annual total operating costs on a single grid covering a 10- or 12-year period. This has the advantage of showing the sales history as well as the net operating income margin at one and the same time. Exhibit I has been provided to illustrate the form.

If there are unusual rigidities in the operating costs, the fact will be indicated by the inflexibility of the cost line in relation to the sales or revenue line. Sometimes the operating performance over time is recorded on a percentage composition chart in which net sales or revenue constitutes 100 per cent for each year. This is a very helpful pictorial expression of the operating analysis described earlier, but it is weak in one respect in that it fails to show the accompanying changes in sales (see Exhibit II).

Exhibit II

General Foods Corporation

Percentage Composition of Net Sales, 1939 to 1950



Too often an increase in operating expenses as a per cent of net sales is looked upon as arising out of failure to exercise adequate control over these costs, whereas the truth of the matter is that sales have fallen off and the costs are not of a kind that can be readily adjusted.

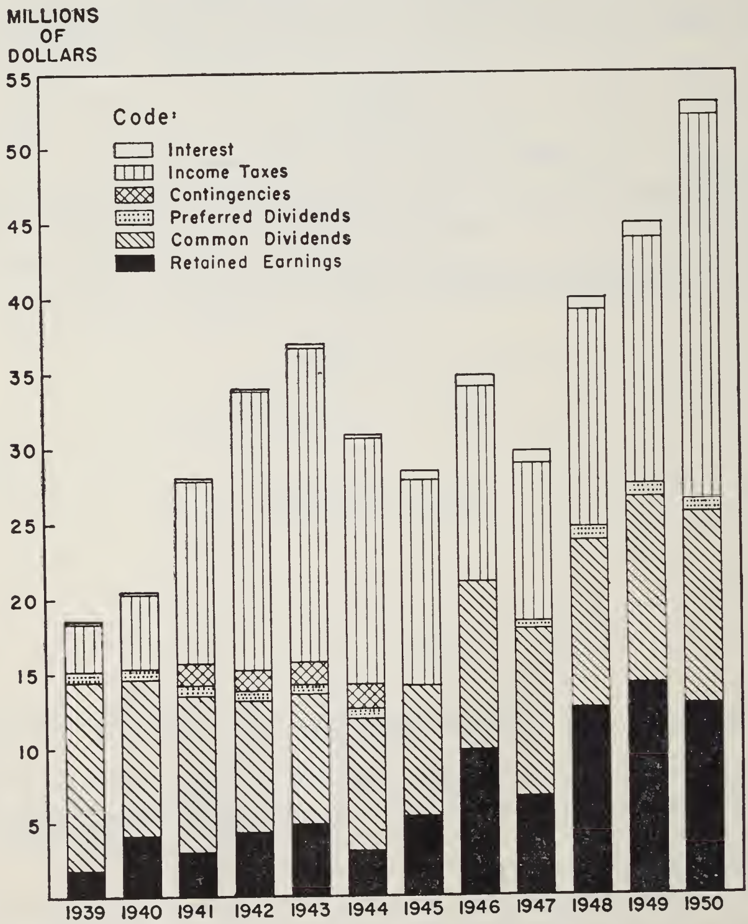
An outsider contemplating investing in a business should give consideration to the uses of the profits realized as well as their adequacy and

stability. For this purpose the best procedure is to start with the sum of the net operating and nonoperating income figures and note the major applications. Consideration should be given to the interest and tax payments and the special appropriations made for the creation of surplus reserves. But the primary concern of the investor is with management policy with respect to dividend payments vs. retained earnings. One of the most valuable ways of expressing the condition pictorially is to construct a bar chart covering a 10- or 12-year span. The form is illustrated in Exhibit III below. For each year a bar is erected to correspond to the total income

Exhibit III

General Foods Corporation

Utilization of Total Income, 1939 to 1950



available. This bar is then divided into component parts representing the various uses. The various parts should be arranged in order of their priority from the top down—interest first, then taxes, reserves, dividends, and retentions. By constructing a chart of this sort, the triple function is served of expressing the historical record of profitability, showing the coverage of interest, and at the same time pointing up past management practices with respect to reserves, dividends, and retained earnings.

The factor of trend in the profitability of a business is, of course, subject to a great deal of speculation in its determination. There are fairly refined statistical techniques that might be used for the purpose, but our concern here is necessarily with the cruder forms of approximation. Except for certain management requirements, a general estimate of future prospects is most appropriate. The detailed information required for refined calculations is generally not available; and the time, effort, and skill required for such calculations are usually too great to be justified by the results.

In speculating as to future performance, the common technique is to rely upon the recent past record and presume that the future, within fairly broad limits, will be governed accordingly. No projections into the future can be made for a particular business, of course, without consideration of general business conditions. But given some appreciation of what the future holds in this regard, then the estimate for a particular business is rather rigidly tied to its own strengths and weaknesses as portrayed by past performance.

Because of the interdependence of the profit and loss statement and the balance sheet, past tendencies of certain balance-sheet items are also often used in judging future profitability. Continual growth of such items as inventory and receivables—the working assets—and net worth, for example, if accompanied by an increase in sales, would suggest a fundamental strength to the business which may well be relied upon to support its profit record in the future. If there is a weakening in the asset position of a company, on the other hand, while business in general or in the particular industry is strengthening, then there is strong evidence to support the supposition that the future of this business with respect to profitability is weak.

A rather standard means for estimating the future profits of a business is the so-called "break-even" chart. This device is mainly used as a tool by management, and is based upon rather detailed information as to the fixed and variable character of the costs. Since it is developed by business in connection with the over-all budget in planning for profits, its discussion will be withheld until the general treatment of that subject matter.

Concluding Remarks

The profitability of a business is of fundamental concern to all interested parties—management, investor, creditor, and regulatory body. The real objective in judging profitability is twofold. First, interest is in the relative efficiency of the operating assets in accomplishing their essential objective—the generation of cash from use. This may be determined by relating the revenue for a period of time to the required investment. The second consideration is the amount of excess cash realized from this gross revenue. This may be determined by subtracting the total costs from the total income. Satisfactory profit performance during a given period of time is dependent upon a suitably rapid rate of conversion and an adequate profit margin. And the earning power of a business is thus measured by dividing the margin by the average investment.

Since the accounting statements are developed at periodic intervals in order to be most useful, a problem arises in connection with their construction. In order to represent accurately the part of current income which is profit as opposed to recovery of principal, approximations have to be made with respect to certain current costs. For this reason, then, the periodic accounting statements do not measure cash flow strictly; but they fail in this regard in order to represent more accurately the probable effect of current operations upon cash flow over an extended period of time. Since cash accounting does not accurately measure periodic profits, in other words, there is need for a special statement which will serve that purpose alone. To say that the profit margin shown by a profit and loss statement measures the excess cash realized during a period of time is not exactly true, but for the purpose of judging the profitability, it should be thought of in that way—assuming, of course, that the statement has been constructed according to sound accounting principles.

In this connection, however, the adequacy of a business's profits cannot be judged by reference to a single year's or even several years' results. Profitability is necessarily a long-term concept, and to be most cautious in its evaluation, one should study performance over an extended period of time. In so doing, the character and stability of operating performance will take their place in the analysis along with the factor of periodic adequacy. Also, the uses to which the periodic profits have been put and recent tendencies in operating results bear directly upon future performance. The whole concern of anyone analyzing the profits of a business is with the future prospects, and to the extent that past performance has been reasonably recorded, a person's judgment of the future will be strongly supported by the type of analyses discussed in this chapter.

Questions

1. In studying the profitability of any business, what particular points should you check into?
2. How is profit and loss information used in judging these conditions? That is, what are the special analytical techniques?
3. What are the two basic factors which govern the earning power of a business? Why is it highly desirable to express the earning power of a business in terms of these two components?
4. What is the significance of the operating leverage concept from the standpoint of profit analysis?
5. What is capital structure leverage? How is it calculated? How is it influenced? What is its significance?
6. What is the special value in converting the profit and loss statements under analysis to a percentage of net sales?
7. What is the special value of comparative profit and loss analysis? What conditions are essential to its use?

PART III

ADMINISTRATIVE TOOLS OF FINANCE: BUDGETS AND FINANCIAL PLANNING

Chapter 8. THE NATURE AND PURPOSE OF BUDGETS AND BUDGETING

The management of a business enterprise is analogous in many ways to the driving of an automobile. In the first place, routine care of the operating mechanism is required if it is to be kept in running order. Second, given suitable mechanical performance, the vehicle must be guided toward its predetermined objective, which, in the case of the business vehicle, is to make profits. And finally, a proper supply of fuel must be maintained at all times. What gasoline is to the operation of the automobile, cash is to the business concern.

The automobile driver in operating his machine is aided by many gauges. By noting the readings of his oil pressure, his speedometer, and his water temperature he is able to judge the performance of his car on the basis of preconceived standards of what each of these gauges should show. However, a knowledge that his machine is operating properly does not ensure reaching his objective unless he has a plan for getting there and a reasonable prospect of obtaining the necessary gasoline. He must know how much farther he has to travel, what the alternative routes are, what the particular hazards and obstacles are. In short, by past experience, reference to road maps, and noting signposts along the way, he must be able to anticipate to a reasonable extent that which is to come. And only by combining these expectations with his knowledge of past and present operating performance can he hope to perform his driving task successfully.

In administering a business enterprise to the end of optimum profits, management is similarly aided by gauges and guides. The analytical tools discussed in the preceding two chapters are largely aimed at interpreting past performance so as to provide management with a knowledge of whether or not the business machine has been operating satisfactorily. Such information, however, is valuable only to the extent to which it stimulates action directed toward achieving satisfactory performance in reaching the desired objective in the future. Management, like the automobile driver, is more concerned with the future operations than with the past. But a knowledge of the past will help in directing action and change required in reaching the final destination.

Consider the analysis of balance-sheet data for example. One of the principal points of interest is the near-term liquidity, or solvency, con-

veyed by the current items. Interest is not in the short-term financial position of the company as of the balance-sheet date so much as what it suggests with respect to the near future. The present position is based upon historical fact and in turn bears upon future expectations. Also in the case of the long-term financial position of a company interest lies in determining financial burdens imposed by past financial activities as they will bear upon future operating and financial strength.

The information contained in the profit and loss statement is utilized in a similar fashion. An outsider contemplating investing funds in a business will rely upon past operating performance as a guide to what might be expected in the future. Management, also, will investigate the operating strengths and weaknesses, not for the purpose of mere historical record but in order to be fortified with reliable information as to what steps might reasonably be taken to obtain more satisfactory performance in the future.

As in the case of driving an automobile, however, business management must, if it hopes to achieve its objective, add to its knowledge of the past by anticipating needs and events of the future. What may seem at the time to be a reasonably sound current position may in reality be grossly inadequate in relation to subsequent requirements. Many times the plans of management represent little more than a rather vague projection of recent trends, so that little is added to the basic information provided by the financial statements. More often, however, there are external factors that must be recognized and used to verify or adjust the historical trend; and in every case there are certain financial expectations, as to new developments, plant expansion or contraction, and changes in operating methods, which cannot be stated in the balance sheet. Knowledge of such future developments is essential if the business machine is to continue solvent (have enough gas in the tank) and be satisfactorily profitable (reach its destination).

This process of planning for future financial requirements to achieve solvency and profitability is known as "budgeting," and the formal presentation of the plan in writing is called a "budget." Budgeting is therefore an application of financial planning in the broadest sense of the term in that it estimates the over-all cash flow of a business during a restricted future period of time. That is, it (1) anticipates the future need for funds to be employed in the business, (2) plans the future sources and uses of funds so far as their investment in particular assets is concerned, and (3) estimates the operating results to be realized from the use of these assets in the circuit flow of funds. In a sense, it takes up where the accounting statements leave off, since the study of the future flow of cash in order to plan for solvency involves estimating a future cash receipt and

disbursement statement and an estimated balance-sheet condition, and to judge future profitability involves estimating future profit and loss figures.

The student will recall that, in the analysis of the financial statements to the end of judging financial condition and profitability, financial condition was considered from both the short-term and the long-term standpoint. Profitability, in turn, was shown to be dependent upon the use or turnover of the assets employed and the profit margin earned on each turn. Accordingly, all these factors must be satisfactorily controlled if desired results are to be realized. Whereas financial statement analysis contributes to their control by providing historical perspective useful in planning future action, budgeting provides for it by (1) anticipating asset needs, (2) planning for necessary financing, and (3) establishing standards by which to test current operating performance. The use of budget estimates in controlling all these phases of business operation is referred to as "budgetary control." Further elaboration of each is to be desired.

1. By anticipating requirements in advance management substitutes a rational plan for snap decisions based upon intuition or "hunch." Such careful calculation of need is more likely to provide for the most efficient investment in assets. The financial handicaps of over- or underinvestment in the various assets can be held to a minimum. In short, the commitment of funds to operating assets can be more effectively controlled at all times to the end of maximizing their efficient utilization as measured by their turnover.

2. Anticipating needs also permits planning for their financing. Perhaps the needs are of the regular operating type or else represent such minor additions that they can be handled out of the ordinary cash receipts flowing from the regular turnover of current assets. If such is the case, special financing may be avoided. Often, however, short-term borrowing is required to support a lag of receipts after disbursements in the circuit flow caused by seasonal fluctuations in sales. Sometimes, too, heavy maturing debt must be met either by incurring additional long-term debt or by substituting some form of equity financing. And, of course, there is the need to arrange for financing of any proposed permanent expansion. Any number of other special incidents requiring extra cash beyond that provided by the ordinary circuit flow could be mentioned, but these are sufficient to illustrate the point.

Ability to plan for future financing in this way is exceedingly important. Failure to provide for a maturing obligation may result in temporary stringency which may cause a contraction of profitable operations if not actual business failure. More than one businessman in recent years has awakened only too late to discover that his cash on hand was

insufficient to pay the Federal income tax on inflated profits and at the same time have enough left over to carry the ordinary operating burdens. Arranging for financing in advance of need avoids hasty and panicky action and enables management to use that method of financing which best fits its requirements and at terms which are most satisfactory. Creditors look with favor upon managements that have some idea of where they are going and can show reasonable needs to support their application for a loan. They are fearful of debtors who develop unexpected crises that require emergency aid.

In this connection, too, it should be realized that *cash* is one of the basic operating assets, and planning for future financing avoids the need of maintaining a large cash fund with its resulting wastes. When cash requirements are not carefully estimated in advance, the alternative to insolvency or reduced operations is the carrying of a cash balance in excess of ordinary operating requirements sufficient to cover exceptional cash demands in the form of maturing debt, purchase of new equipment, slowing up of collections on account, etc. In fact, the need to anticipate future cash position and plan for future financing is considered so important to successful business management that the master cash budget that pictures cash inflow and outgo may be thought of as the heart of the budgeting process.

3. The third and final point at which budgeting contributes to control and furthers the profit objective is in establishing standards or limits against which to check current operating performance. The purpose of this is to see that revenues are maximized and expenses are held to a minimum. Achievement in this regard will result in the most satisfactory turnover and profit margin that can be had with the resources of the given business. In using the budget for this purpose, actual performance is compared with the budgetary estimates, and proper action is taken to remedy any serious discrepancy. This does not mean that operations are necessarily unsatisfactory and must be corrected whenever a discrepancy arises; the fault might lie with the original estimate because of failure to have foreseen certain developments.

The student must make sure to learn at the very beginning of his study of the subject that all budget estimates are not a rigid outline which future operations must follow. Such an assumption is completely contrary to one of the purposes of budgeting, for this procedure would destroy freedom of administrative action in attaining optimum profits and shackle the operations to preconceived ideas. When operating budget standards are out of line because of some error in forecasting, as with respect to expected sales volume, the accepted process is to alter the other budget estimates accordingly by applying standard ratios of costs or asset re-

quirements to the adjusted volume figure. This adjustment of budget estimates as subsequent changes dictate is known as "variable" or "flexible budgeting" and is the system which generally prevails in business today.

The idea that budget estimates are not rigid dictates of policy and should be adjusted for changed conditions in order to contribute more effectively to the control of operations has certain limitations, however. So far as the anticipation of asset requirements is concerned, action once taken cannot be corrected. And the more permanent the asset commitment, the greater the effect of any budgetary error. A wrong forecast, in other words, can misdirect management action seriously in the area of fixed asset policy. A wrong forecast, though, cannot frustrate control over current costs and receipts; for action is not tied to the forecast, only the standards for comparison. And when the forecast is out of line, these standards can be adjusted accordingly. It is only in this latter sense that variable budgeting is consistent with the aims of budgeting.

Because of this difference in the use of budgetary information for control over fixed asset policy and control over current operations, a dilemma arises in connection with selection of the length of time that the forecast should cover. To be most useful in contributing to fixed asset policy, the budget period should be long. To be most accurate in a forecast, on the other hand, the period should be short. It is not difficult to project a buiness's needs and operation one day or even one week into the future, but such a projection can offer no help to basic asset policy. Furthermore, effective control over current operations requires short periods also in order to permit rapid review of the situation and avoid the possibility of disorders being allowed to continue for long periods of time without being observed and corrected.

Reconciliation of this dilemma between maximum usefulness for long-term asset determination and maximum usefulness for current control purposes is accomplished in practice by a combination arrangement whereby the budget period is no single length of time but a composite of different periods. For example, there may be a five-year projection to be relied upon for fixed asset policy and other long-range plans and a year's forecast to serve as a basis for anticipating current asset needs and controlling current performance. This year's forecast will, in turn, be broken down into semiannual periods; and the first half year will be expressed in terms of quarters. Sometimes the whole first half year will be broken down on a monthly basis; in other cases only the first quarter will be so expressed. Whether or not the monthly data are further reduced to weekly figures depends upon the nature of the business with respect to the rapidity of the turnover cycle for different assets and the size of the cash

fund. The smaller the cash reserve in relation to operating needs, the greater the requirement for short budgetary periods.

As time elapses, any changes in current conditions from what was anticipated influence the longer range forecasts. The process of budgeting is not one of making a single projection and then waiting until that time has elapsed. Rather it is a continuous process of projecting into the future. As the budget is reviewed monthly or quarterly, in other words, corrections are routed through the whole sequence of forecasts and the long-range budgets extended on this new basis. The idea is to maintain a five-year, two-year, one-year, etc., projection into the future with a lag of only one month or one quarter, depending upon how often the estimates are revised. The longer range forecasts, of course, are not expressed in very detailed fashion, but those estimates which are close at hand are broken down very thoroughly. It is these latter which are used as standards or checkreins for the control of current operations, cash flow, and current assets.

The fact that a budget can be wrong should not serve as a source of discouragement. On the one hand, it has already been shown that so far as control over current receipts and costs is concerned the budget estimates serve merely as points of check rather than dictates to action. Therefore, even though a discrepancy between actual performance and budgeted data is to be explained by an error in the latter rather than correction needed in the former, the very investigation into the cause will improve management knowledge of the situation and further its control. Furthermore, with respect to the fact that an erroneous forecast can misdirect asset policy, the point must be recognized that the choice involved is not one of operating with a budget or without one. Any business decision, particularly with respect to the employment of assets, is inescapably tied to a preconception as to the future. The question is: Shall this future estimate be based upon "hunch" and intuition, or shall it be developed more objectively from the standpoint of existing facts? A carefully prepared forecast may be wrong, but the chances are that it will be less wrong or will be wrong fewer times than will an impulsive guess.

There are some forms of budgets and budget standards, in contrast to the variable budgets, that are rather rigidly held to by management in establishing limits over cash expenditures to which the responsible party must conform. These are known as "appropriation budgets." Although they are primarily used in connection with nonprofit organizations, such as governmental bodies and charitable and educational institutions, they are found in large business endeavor in controlling the expenditures of staff departments. While a change in sales volume might alter the esti-

mates of operating costs because of the mixture of fixed and variable costs, it need have no effect upon the expenses of such departments as advertising or research.

The object of this general statement on budgets and budgeting is to provide background to the subject, particularly the purpose and value of such activity in the administration of business enterprise. The next succeeding chapters will develop the subject in more detail. Immediately following is material enlarging upon the use of the budget for maintaining solvency. Emphasis is given to simplified techniques for small business situations. The subsequent chapter then investigates the various uses of budgets and budgetary data in furthering the aim of maximizing profits. Particular attention will be given to factors bearing upon the size of the various asset investments. Chapter 11 then traces through the various steps involved and forms used in developing a detailed budget.

Questions

1. What is a budget? What is its purpose? How is it related to the concept of cash flow?
2. How is budgeting related to the triangular relationship?
3. How is the budget related to the accounting statements in serving administrative control?
4. Just how does the budget serve as an administrative tool? In what ways does it facilitate control?
5. Once a budget is developed, should it ever be changed?
6. If a budget can be wrong, is there not great danger in having administrative decisions and policies based upon it?
7. In what sense is it appropriate to say that every business must budget in some way?
8. Why is it very important to select the proper budget period?
9. What is the difference between a variable budget and an appropriation budget? Which is more useful to business operation? Why?

Chapter 9. PLANNING TO MAINTAIN SOLVENCY

Cash, we have seen, is the lifeblood of any business unit operating in a money economy. A healthy cash flow at all times is necessary to the protection of the solvency of the business and the maximization of its profits. As such it must be subject to constant scrutiny and safeguarded against misappropriation and dissipation. Furthermore, in order that there should be no stoppage to or shrinkage in the flow of funds, an adequate cash balance must be maintained at all times. Control of this fund for the purpose of maintaining a healthy cash flow is one of the primary responsibilities of financial management.

Reasons for Maintaining an Operating Cash Fund

An operating cash fund is essentially a reservoir of money to serve the same basic purpose as any more familiar reservoir. In the preceding chapter the analogy was drawn between gasoline to the automobile and cash to the business. A comparable analogy could be made, however, with many other types of reservoirs, such as a city's water supply or an inventory of raw materials.

There are two basic reasons for the creation and maintenance of any reservoir, whether it be water, gasoline, merchandise, or cash. One may be called the "absorption function" and the other the "emergency function." If ordinary receipts and disbursements of any article do not mesh perfectly, there is need for a standing supply to be drawn upon if disbursements are not to be hampered. The supply, in other words, absorbs the shocks of sporadic receipts and permits unchanging compliance with needs within certain limits. In any business it is practically impossible for receipts and disbursements of cash to conform perfectly, and so there is always some need for a cash reservoir to provide continuity to operations. The size of this fund will depend upon the characteristics of the business in this regard and the additional need for the performance of the emergency function.

Even though a business had no need for a cash fund to serve the absorption function (an almost inconceivable situation), a certain cash reserve would still have to be maintained in order to protect the company against extraordinary and unforeseeable drains or to permit adaptations to competitive change. The first contingency can be illustrated by damage to inventory or plant, requiring immediate replacement or repair. The

second might take the form of a favorable price drop on raw materials, justifying immediate quantity purchases, or an innovation in operating methods, requiring immediate change on the part of the company. In either of these second cases failure to make the required outlay because of deficient cash supply can result in a loss of competitive position, which, though initially of a temporary character, could conceivably develop into a chronic situation.

A cash fund alone is not required to serve these functions of absorption and emergency. The availability of outside financing on a short-term basis directly bears upon the problem. The easier the access to such loans, the smaller need be the regular cash balance—particularly in connection with its emergency function. Therefore, access to the short-term money market for support of the cash position may be looked upon as a third factor bearing upon the size of the operating cash fund required. But in this connection it must be noted that such access in turn is partly dependent upon a good current position of which an adequate cash balance is a basic part.

Clearly, because of the uncertain character of the specific uses of a cash fund, exact determination of the appropriate size is practically impossible. In most cases past experience is relied upon as a guide, and figures so determined may be crudely adjusted for seasonal or cyclical changes by rules of thumb. One such rule is that a cash fund should be at least equal to the next month's or two weeks' expected cash expenditures. The length of the period chosen will conform roughly to the collection experience of the company. One having a long collection period will tend to have a proportionately larger need for cash on hand, and vice versa. A company selling entirely for cash, for example, need, under ordinary conditions, carry enough cash to cover only a few days' expenditures. In any case, though, the relative stability of the company's operation will have the greatest influence upon the size of the cash fund.

Another rule of thumb governing the amount of cash to keep on hand is based upon the normal relationship of cash to total current assets. This proportion will vary with the business in accordance with the considerations brought forth above and is therefore largely a standard established for each separate business on the basis of past experience. The relationship of cash to current liabilities also may carry logical significance and is sometimes used as a test of the above two rules and may even be considered independent of them.

A case in point, for example, is that of a furniture-manufacturing company which on its 1948 year-end balance sheet showed current assets of $888,000 and current liabilities of $143,000, or a current ratio of 6.2 to 1. The liabilities, however, were all of the most urgent types, being com-

posed as follows: accounts payable, \$35,900; Federal income taxes, \$63,600; accrued wages and commissions, \$26,700; miscellaneous accruals, \$16,000. The cash account, on the other hand, amounted to only \$11,000, or 1.2 per cent of total current assets. This relationship alone would point up a probable deficiency but not in as dramatic a fashion as to show that the cash on hand was only 41 per cent of accrued wages and commissions and 25 per cent of the total accruals! The company, as it turned out, was able to alleviate its very serious cash position by immediately executing a commercial bank loan. In so doing, however, it suffered from the making of protective warranties to the bank which had the effect of restraining management control until the current position was brought back to normal.

Although it is clear that the amount of cash to be had available at any one time can be only crudely approximated, still it behooves management to be as careful in this calculation as possible. As has been shown, deficient cash supply can be disastrous; and even though a superfluity of cash contributes to safety, it is to be avoided for the sake of profitability. One of the continual responsibilities of management is to maintain a happy balance between solvency and profitability. Too much attention to one is likely to jeopardize the attainment of the other. Once management has reached a definite decision as to the appropriate size of the cash fund, it must then be sure to keep a careful and up-to-date record of changes in the actual balance so as to assure conformance to this predetermined standard.

Tools for Controlling the Cash Balance

When we speak of management tools, we almost invariably think of accounting records and financial statements. And these latter, in turn, generally include the balance sheet and the profit and loss statement. Despite the practical usefulness of these two statements in connection with business operation, it must be understood that neither serves financial management in its most important responsibility—the control of cash. The balance sheet expresses the value of the cash account as of the close of a single day, but a running balance is what is required for effective control. The balance-sheet information is far too intermittent and delayed in its preparation for satisfactory use in this regard.

The profit and loss statement is defective in serving the control of cash for several reasons. Like the balance sheet, the statement is not prepared frequently enough and is not promptly available. But more important, it is not designed to record all changes in the cash balance. There are two major reasons for this that have already been mentioned in an earlier

chapter: (1) All cash transactions are not recorded, and (2) all transactions recorded are not cash. Let us consider each of these points fully.

All Cash Transactions Are Not Recorded. As pointed out in Chapter 4, profit arises only when there is a net increase in asset value resulting from regular operations. Increase in asset value through new investment, therefore, does not constitute income and must not be included in any accounting for profit. Such would be the case with a loan from a bank or the investment of new money by the owners. Similarly, return of capital funds to owners or lenders does not constitute an expense to be reckoned in the accounting for profit but constitutes a drain on the cash reserve nonetheless. By the same token, a capital expenditure, such as the purchase of new equipment, changes the value of the cash account without incurring an expense for the period. The composition of the total assets is changed, but not their value.

All Transactions Recorded Are Not Cash. Also in Chapter 4, the point was made that the profit and loss statement is peculiarly created to measure periodic profitability and that alone. To serve such a purpose effectively, income and expense items must be taken into account even when they are not supported by a corresponding cash transaction. Such is the case, for example, with expenses like depreciation, depletion, and amortization of deferred charges. Also to the point are the accrued income and expense adjustments. Sales on credit, furthermore, are treated as income for a period even though cash proceeds will not be collected until the subsequent period. The Bad Debts charge, although noncash itself, is not always treated as such because of its being more exactly an adjustment of this noncash income. Clearly, straightforward cash accounting is sacrificed for the sake of more accurate profit accounting. And such being the case the financial officer must look to other statements and forms for helping him in his efforts to control cash.

With most small businesses the owner-manager is regularly informed of his current bank balance each time he draws a check in payment of some expense. This balance, in turn, he automatically relates to some preconceived minimum requirement. If it reaches a dangerous stage, he is inclined to review the causes of the special drains during the recent past and also to try to determine what the future holds in store with respect to the correspondence of receipts and expenditure. If continued drains seem to be in prospect, he will then try to seek support of his cash position through outside credit.

As the size of the firm increases and financial management is separated from the actual check-drawing operation, special statements, formal reports, or summaries of cash position may be developed for use by the fi-

nancial officers. The statement that is most commonly available for use in this regard is the "cash statement," sometimes more fully termed the "cash receipts and disbursements statement." Here all cash transactions are recorded regardless of their source and bearing on profit performance, and so a continuous up-to-date account of the balance together with a historical record of how it has been reached is available for checking and interpretation.

Since the receipts, disbursements, and running balance are carried in separate columns, use of the statement for purposes of control is simplified. If a minimum cash balance has been established along the lines discussed earlier, reference to this statement can determine whether the business is keeping in line and, if not, what the major drains have seemed to be. The major drawback to the statement is that it alone can do nothing to warn the company of future drains of an erratic sort.

A form which at times may be very helpful in *interpreting* the change in cash balance over a full operating period is one which reconciles the change in terms of the profit and loss statement information and other balance-sheet transactions which have transpired. Rather than being a complete record of all transactions, as with the cash statement, it is a summary statement to be used in conjunction with the balance sheet and profit and loss statement. An illustration of this form appears in Exhibit I.

It must be emphasized that this statement contributes to the control of cash only by providing perspective as to the main reasons for recent changes in the balance. It shows the forest instead of the trees. By converting the profit figure to a cash basis greater appreciation of the character of this profit figure is provided, and the future prospects of the cash account are better understood. In the above case, for example, although the recorded book profit is $23,000, cash has actually decreased by $25,000. There are various contributing factors to this condition, but a principal one is that the profit is what may be termed "inventory profit"—profit arising from appreciation of inventory value. To a large extent the $57,000 increase in inventory represents an expansion of physical size, but an equally large portion can be explained by a rise in unit prices and inventory value based upon first-in, first-out (FIFO). Regardless of the apparent satisfactory character of these "book profits," therefore, further expansion in the future must be curtailed or additional funds raised to support the cash position.

An illustration of a practical application of this type of reconciliation statement is provided by the United States Steel Corporation's use of it in connection with its testimony before both the President's Steel Board investigating the 1949 labor dispute and the Joint Congressional Commit-

EXHIBIT I

ERICKSON AND THOMPSON PARTNERSHIP

Reconciliation of Operating Profit per Books with Changes in Cash Balance in the Year 1951

Cash balance, Jan. 1, 1951			$44,000
Cash balance, Dec. 31, 1951			19,000
Net change (decrease)			$25,000
Add back supports to cash during year:			
Partner's loan			25,000
Total consumption of cash during year, to be accounted for			$50,000
Withdrawals by partners:			
A. B. Erickson			$15,000
J. D. Thompson			13,500
Total			$28,500
Consumption through operations:			
Net profit per statement		$23,000	
Add back noncash expenses:			
Depreciation	$ 3,500		
Expired insurance	500	4,000	
Profit adjusted for noncash expenses		27,000	
Deduct capital expenditures and noncash income:			
Increase in inventory	$45,500 [a]		
Insurance premiums unexpired	700		
Purchase of equipment	1,500		
Accrued rent receivable	800	48,500	
Net drain of cash through operations			$21,500
Total consumption of cash during year			$50,000

[a] The total inventory increase of $57,000 was offset by an increase in Accounts Payable of $11,500.

tee on the Economic Report (Exhibit II).[1] The statement illustrates how although during the three years 1946, 1947, and 1948 and the first nine months of 1949 a profit aggregating $212,100,000 was realized, the cash balance actually shrank over the same period of time by $112,700,000. This cash deficit, in turn, had to be covered by sale of government securities which the company had purchased in prior years. Such an exhibit can be

[1] "U.S. Steel's Policies on Costs, Prices, Plants, Productivity," *Testimony by Officials of United States Steel before the Joint Committee on the Economic Report,* Washington, D.C., Jan. 24, 1950.

Exhibit II

United States Steel Corporation

Cash Flow—In and Out—January 1, 1946, to September 30, 1949

(In millions of dollars)

	Sales, Costs and Income					Adjustment of Totals to Cash Basis		Total Cash Receipts and Disbursements
	1946	1947	1948	9 Months 1949	Totals	Explanation	Amount	
Receipts from Customers—The Public	$1,496.1	$2,122.8	$2,481.5	$1,916.8	$8,017.2	Add—Proceeds from sales of properties .... *Less*—Increase in uncollected receivables	$ 29.3 *75.5*	**$7,971.0**
Disposed of as Follows Employment costs U. S. Steel's direct employment ...	704.5	903.6	1,035.7	764.3	3,408.1	*Less*—Increase in unpaid employment costs ..	*43.0*	**3,365.1**
Products and services bought Provides *employment* by suppliers and by their suppliers in turn ..	560.4	839.4	1,008.9	750.3	3,159.0	Add—Payment of war costs and other items charged reserves .... Increase in inventories and deferred costs ... . *Less*—Increase in amounts owed to suppliers	43.7 124.4 *42.5*	**3,284.6**
Wear and exhaustion Provides *employment* by suppliers of new plants and equipment and by their suppliers in turn ..	68.7	114.0	146.0	111.4	440.1	Add—Use of proceeds from sales of properties Other amounts expended .... Total expenditures for property additions and replacements	29.3 348.6	**818.0**
Taxes Provides *employment* by governments and by their suppliers in turn State, local and miscellaneous Federal income	69.1	136.2	158.9	155.9	520.1	*Less*—Increase in unpaid taxes	*194.7*	**325.4**
Interest Compensation for savings loaned ... Dividends Compensation for savings invested	64.8	73.4	79.8	59.8	277.8	*Less*—Increase in unpaid dividends .... Repayment of borrowed money	*4.4* 17.2	**273.4** **17.2**
Income reinvested	28.6	56.2	52.2	75.1	212.1	*Less*—Used toward increased receivables, inventories and expenditures for property additions and replacements....	*212.1*	**—**
	$1,496.1	$2,122.8	$2,481.5	$1,916.8	$8,017.2		$ 66.5	**$8,083.7**

Deficit in cash			**$ 112.7**
Met from Sale of Government securities		$140.1	
Increase in cash funds: Balance January 1, 1946 .... Balance September 30, 1949 ..	 $231.8 259.2	 *27.4*	 **$ 112.7**

of substantial help to large corporations in showing that increased dividends or increased wages cannot always accompany increased profits. The sources and uses of such profits must also be taken into consideration.

Sometimes a formal summarization of the cash statement is provided in place of this type of reconciliation statement. The value of such a summarization is that through condensation and organization a clearer picture is offered of the major currents of the cash flow for the particular period of time covered than is shown in a complete cash statement. The major sources and uses of cash during the year are highlighted. An illustration is provided in Exhibit III, based upon the same data as was used in Exhibit I.

Exhibit III

Erickson and Thompson Partnership

Summary of Changes in Cash Balance for the Year 1951

Cash balance, Jan. 1, 1951		$ 44,000
Causes for increase during year:		
1. Receipts from merchandise sales	$135,000	
2. Sale of equipment	5,000	
3. Rental income	7,500	
4. Loan from partner	25,000	172,500
Total cash available for use during year		$216,500
Causes for decrease during year:		
1. Purchase of merchandise	$126,500	
2. Miscellaneous operating expenses	40,000	
3. Purchase of insurance	1,000	
4. Purchase of equipment	1,500	
5. Withdrawals by partners	28,500	197,500
Cash balance, Dec. 31, 1951		$ 19,000

The same basic information can, of course, be gained from study of the cash statement directly, but a formal summarization of this sort has the advantage of eliminating a large amount of laborious detailed checking by the reader, and by differentiating in presentation between the significant and the minutia a better over-all appreciation of the cash flow is permitted. In comparison with the profit-cash reconciliation statement, however, it has a distinct disadvantage. It does not interpret the cash changes in a way that is consistent with the profit results. In Exhibit III, for example, the information would seem to support an operating loss rather than a profit were not the additional fact of inventory increase known. In either case the cash change is explained, but the reconciliation

approach is less perfunctory in making the explanation in terms of operating performance.

This cash summary statement recalls another form which contributes to the control of cash but which has already been considered fully in a separate chapter—the historical flow-of-funds statement. As pointed out at the time, the value of this is not that it offers a means of providing current control over the cash balance but rather that it affords historical perspective with respect to the general cash flow of the business and thereby contributes to the formation of policy which will have bearing upon the company's future cash position.

Anticipating Cash Needs

All the forms discussed up to this point have one thing in common: recording or summarization of the past or present. Such information may be necessary to effective control in showing the existing balance and in permitting review of the major disbursements which can suggest corrective action to be taken in the future. But a record of the past does not alone provide for control of the present. Such control is also dependent upon a plan of the future to which current performance can be compared. This plan may take the form of a rather arbitrarily calculated minimum requirement, as already explained, but it is more appropriately based upon study of probable future needs and receipts.

Real control over cash for the purpose of protecting a business's solvency, in other words, *requires primarily an estimate of future cash needs.* This was stressed in the preceding introductory chapter. To be able to know what the cash balance is at any one time is of slight advantage to the person who does not also know what the future holds with respect to receipts and disbursements. Reliance cannot be placed upon the knowledge that there are 4 gallons of gasoline in the tank unless the remaining distance that has to be traveled and the availability of service stations along the way are also known.

Anticipation of future cash receipts and disbursements is admittedly not a simple task. Speculation as to any number of variable factors has to be made: unit sales, prices of goods sold and bought, collections on account, miscellaneous costs, etc. But in any case, careful study of and planning for cash flow can provide management with very helpful guideposts. Whereas the cash statement may be said to record the cash flow of the past, the cash budget anticipates cash flow for the future.

Planning for cash needs in this way can take one of two forms. (1) It may grow out of an over-all detailed budget of future operations. In this case, the cash receipts and disbursements are taken from the various supporting schedules, and so the resulting cash budget is automatically

governed by the plans for the individual departments and operational activities. This type of cash budget is illustrated in Chapter 11, where the development of such a detailed budget for the purpose of over-all control is considered. (2) On the other hand, there may be no interest in a completely detailed operational budget and therefore no basis from which to draw off a projection of cash flow. In such a case a rough approximation of cash needs over a period of time might be had by interpreting general estimates of operating results as they will affect cash. The resulting statement, though representing a broad approximation, can be very useful to management in gauging and protecting future cash position. The procedure is known as the "balance-sheet" or "generalized" approach to cash budgeting. An illustration follows.

Assume a business expects its operations for the next 6 months to be represented by the following statement of profit and loss:

Estimated Statement of Profit and Loss for the Next Six Months

Sales		$90,000
Cost of goods sold		55,000
Gross profit		$35,000
Operating expenses	$20,000	
Depreciation	1,000	21,000
Net operating income		$14,000
Federal taxes		4,000
Net profit		$10,000

Assume further that the existing balance sheet for the company is as follows:

Assets		*Liabilities*	
Cash	$ 10,000	Accounts payable	$ 10,000
Receivables	25,000	Accruals	3,000
Inventory	45,000	Reserves for Federal taxes	4,000
Total current	$ 80,000	Total current	$ 17,000
Fixed assets—net	20,000	Net worth	83,000
Total assets	$100,000	Total liabilities	$100,000

In planning for the six months' operations shown in the above profit and loss statement management has anticipated that by the end of the period the rate of activity will be 50 per cent higher than it is at present.

Also, in order to take advantage of this opportunity for higher volume, which is looked upon as part seasonal and part permanent, additional equipment, amounting to $10,000, is to be purchased.

On the basis of all these facts it is possible to project a balance sheet as of the end of the six-month period. To follow the changes that will take place in the financial condition of the business, Exhibit IV will prove helpful.

Exhibit IV [a]

Item	Beginning balance sheet	Profit changes	Volume changes	Final balance sheet
Cash	$ 10,000	+$13,000	−$38,500	−$15,500
Accounts receivable	25,000	......	+ 12,500	37,500
Inventory	45,000	......	+ 22,500	67,500
Total	$ 80,000	......	......	$ 89,500
Fixed assets—net	20,000	− 1,000	+ 10,000	29,000
Total assets	$100,000	+$12,000	+$ 6,500	$118,500
Accounts payable	$ 10,000	......	+$ 5,000	$ 15,000
Accruals	3,000	......	+ 1,500	4,500
Reserves for taxes	4,000	+$ 4,000 − 2,000	......	6,000
Total	$ 17,000	......	......	$ 25,500
Net worth	83,000	+ 10,000	......	93,000
Total liabilities	$100,000	+$12,000	+$ 6,500	$118,500

[a] This form may be varied according to need to allow for other major factors affecting cash by the addition of another column, Other, after Volume changes. Here could be included withdrawals or dividends, payments on loans, sale of fixed assets, etc.

In establishing the changes that will result from the estimated operations, the profit figure must be converted to a cash basis. In other words, all noncash income must be excluded from the expected profit figure, and all noncash expense items must be added back. In the present case there are only two noncash items—depreciation and Federal taxes—both expenses. Therefore the net cash increase from operations is the $10,000 profit plus the sum of these two items of $5,000, or a total of $15,000. From this figure, though, must be subtracted the $2,000 that will have to

be paid during these six months on last year's tax liability of $4,000. Therefore, in all, cash is expected to increase by $13,000.

The volume changes illustrated are mainly those caused by the expectation of a 50 per cent rise in business activity by the end of the period. The fixed asset change is the one exception, it being governed by the decision to purchase additional equipment up to the amount shown. In the case of the working assets, however, and the corresponding current liabilities, it is reasonable to assume that their size will be increased in keeping with the volume change, namely, by 50 per cent. This rule is admittedly somewhat crude. But in the absence of a more refined estimate of the future it is probably as reasonable an approach as can be followed.

In applying the rule to the above facts it is found that assets are increased by $38,500 more than the current liabilities. This difference will therefore have to come out of cash. A point of caution should be noted. The assumption of volume change is applied only to those assets and liabilities which are automatically tied to operations—the working assets, accounts payable, and accrued liabilities. Miscellaneous assets, net worth, negotiated debt, etc., are not so affected.

Given the estimated final balance sheet, management is then able to judge the adequacy of its future current and cash position. In reaching this judgment one would apply the standard ratio analysis described in Chapter 6 along with the established standard of minimum cash requirement. In the present case, although the total current assets are in good proportion to the current liabilities, the cash supply is clearly grossly deficient. Some $20,000 to $25,000 will have to be raised from some source if the anticipated volume changes are to be realized. This borrowing will in turn somewhat alter the profit expectations because of the additional factor of interest to be incurred. But the correction would be so small as to be ignored for the purpose of the planning.

In order to concentrate upon this cash position of the company during the next six months, a simplified cash budget may be constructed from the facts given, as follows:

Balance on hand, beginning		$ 10,000
Receipts: Collections from sales		77,500
Total cash available		$ 87,500
Disbursements:		
For merchandise	$72,500	
For expenses	18,500	
For taxes	2,000	
For fixed assets	10,000	103,000
Balance on hand, ending		−$ 15,500

A few items in this statement may need explanation. Since accounts receivable will be $12,500 greater by the end of the period, that amount of the $90,000 sales will presumably not have been received in cash form; therefore receipts from sales will amount to only $77,500. Similarly, since accounts payable are to show an increase of $5,000, the purchases of merchandise will be that much less in cash outlay, or a sum of $72,500 —$55,000 cost of goods sold plus $22,500 increase in inventory on hand minus the $5,000. Finally, cash expenses will amount to $18,500 as shown rather than $20,000 because of the $1,500 increase anticipated in accruals.

Study of this statement points up a significant explanation of the cash deficiency: collections on sales amount to only $5,000 more than outlay for merchandise. The justification for this exists in the fact that the date chosen for the final balance sheet represents the expected point of peak seasonal need. During the months immediately succeeding this point of time, purchases of new merchandise will be held down, and the inventory will be reduced by being converted back into cash. During this period collections will greatly exceed outlays for purchases, and over the full year's time the relationship between the two will presumably average out as adequate.

This particular point serves to illustrate the need for careful selection of the appropriate budget period in making the type of analysis illustrated above. Had the plan covered a period of time that extended beyond the peak need, it would not have aided in the control of cash—rather it might have interfered with it. The final cash balance in such a case would not have shown the strain to which it had been put at a preceding time. Because of the generalized nature of the approach, interim conditions are not portrayed, only the end result. Therefore, it is of the essence that the time chosen for the projection conform to the seasonal operating pattern, with the estimated balance sheet calculated for the next succeeding highest or lowest points.

Summary

The effective control of cash is one of the most important requirements of successful financial management. Cash is the lifeblood of business enterprise, and its steady and healthy circulation throughout the entire business operation has been shown repeatedly to be the basis of business solvency. To safeguard this cash flow, it is necessary to maintain an adequate reservoir which can absorb the shocks of sporadic receipts and meet the needs of emergency situations. The appropriate size of this reservoir can be soundly determined for each business only on the basis of past experience and in the light of future expectations. But regardless

of the exactness of the estimate at any one time, the problem exists in any case of keeping it intact and available at the most crucial times.

Although current records of cash balance are indispensable to the successful accomplishment of this objective, anticipation of future cash needs is even more valuable. This introduces the necessity of careful budgeting and estimation of future operating performance. Some help in this direction can be provided by a generalized estimate of needs at some future critical point of time. But it is even more effectively accomplished through a detailed planning of total operations—the subject of the second chapter from this.

Questions

1. What is the purpose of maintaining an operating cash balance?
2. How does a cash balance contribute to the objective of maintaining solvency? Of furthering profitability?
3. What special records are used for the control of cash and maintenance of solvency?
4. Why is the profit and loss statement deficient in this regard? Why is the balance sheet deficient in this regard?
5. Of what value is the profit-cash reconciliation statement? How does this statement relate to the earlier fund-flow statements of Chapter 5?
6. Why is it correct to say that *real* protection of a business's solvency is dependent more upon anticipating future needs than correctly recording past uses?
7. Why is the time interval covered so important to the effective use of the balance-sheet approach to cash budgeting? Does this point have any general applicability?
8. When would such a simplified budget be used?

Chapter 10. BUDGETING TO FURTHER PROFITABILITY

The two preceding chapters have shown the need for planning the cash flow to administer properly the control of funds within a business and have described the budget as the tool used by management to give concreteness to the plan. The question now arises as to how the budget is used to attain the planned profit objectives, as well as certain other principles governing financing. These uses of the budget may be divided into two broad categories, that of controlling the use of the funds to attain maximum profitability, and that of aiding in the acquisition of new funds (financing) or the intelligent disposal of excess funds. The discussion of the use of the budget for purposes of profit control may be subdivided for clarity in presentation into (1) the control of sales and expenses in the day-to-day operations of the business and (2) the control of the investment in assets. These two elements of control are not unrelated, as will be apparent from the ensuing discussion, but it will facilitate the understanding of the subject to take them up separately. It is important to point out, however, that use of the budget for purposes of maintaining an adequate cash supply and aiding in the acquisition of new funds is accomplished through control of the one asset *cash.*

Some authors list as an additional major use of the budget the coordination of the functions of departments of the business. Later discussion will show that this coordination comes about automatically if the budget is properly used as an instrument of control.

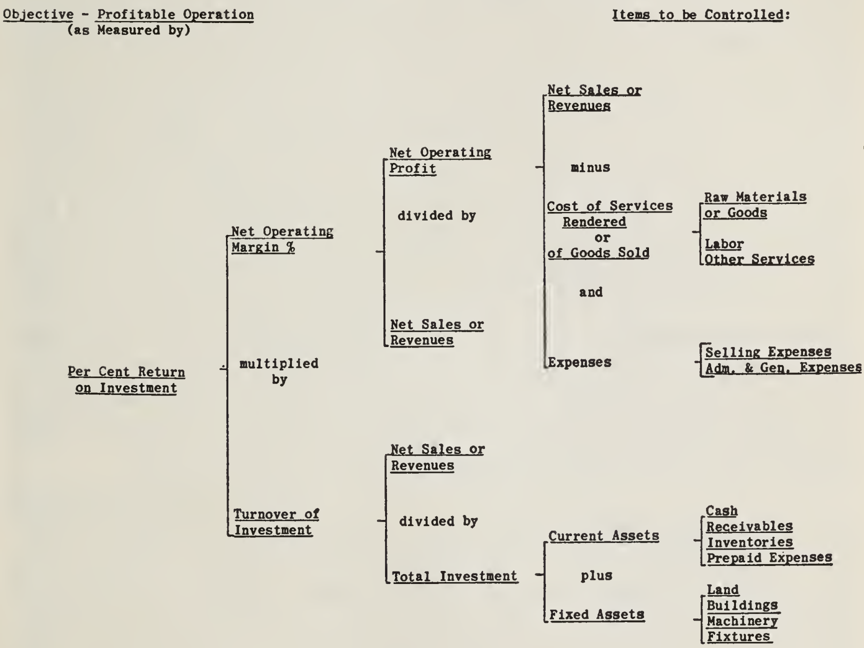
The interrelation of the various items which are to be controlled as they relate to the objective of profitable operation in terms of per cent return on investment is diagramed in Exhibit I. The rate of return on the investment in the business is the product of the net margin on sales and the turnover of the investment. (For purposes of simplifying this discussion, "investment" will be identified as the "total tangible operating assets," which means ignoring (1) the usually minor nonoperating assets and (2) the difference between the "investment" in assets and the "investment" of the owners caused by trading on equity. The latter subject is discussed in various other places.)

The top half of the diagram shows the derivation of the net margin on sales. On the right-hand side is a breakdown of the principal classes of expenses of the business. It is the control of these expenses and sales through the use of the budget that is the first major topic discussed in this

chapter. The proper control of these expenses should help the business to obtain the greatest net margin on any given volume of sales. The lower half of the diagram shows the derivation of the turnover of investment. The items listed on the right show the major categories of assets found in most businesses. The proper control of the investment in these assets in their relation to sales should help to maximize the turnover of the

EXHIBIT I

CONTROL OF SALES, EXPENSES, AND ASSETS TO MAXIMIZE RETURN



investment. The control of the investment in assets is the second major topic in the chapter. It is thus apparent that if the budget can be used as an aid in maximizing the net margin and the turnover of investment in assets it is an exceedingly useful tool of management in its endeavor to secure the optimum return on the investment.

In the following discussion it must be remembered that the return on investment is the main objective and pushing sales, keeping down asset investment, and maximizing the net operating margin are only means to that objective. The reason for underlining this point is that overemphasis on the means sometimes interferes with the main purpose. Sales may be sought that cause more expense than they are worth, investment may be curtailed so greatly as to interfere with making sales, profits can be

pursued so hard as to cut sales more than in proportion to profit gained. These possibilities will receive recurring attention in these pages since business actualities show the ever-present danger of an unbalanced effort that interferes with optimum return.

The Control of Sales and Expenses

While management may gain some help from the fact that it has to think of the future, and in rather definite terms, if it formulates a budget, one of the principal advantages of this planning is lost if the budget is not then used as an instrument of control. To prepare a budget and then forget what it contains is to minimize the help and guidance it can give. One author has likened the budget to the speedometer of an automobile.[1] Suppose you had to drive from Chicago to Waukegan, Illinois, a distance of 35 miles, within an hour, and over a road with which you were unfamiliar and on which you knew none of the landmarks to indicate your progress. A watch would tell you whether you got there within one hour, but it would not have helped you to determine your rate of progress while there was still time to alter it. If you had not reached Waukegan within an hour, you would be in the position of the executive who on reaching the end of the year finds that he has not attained his budgeted objective. If you watch the speedometer as you drive, you know that the moment your speed slackens to less than 35 miles an hour you will have to make up the lost time if you are to get to Waukegan within an hour.

However, even the speedometer is inadequate as an analogy except for those firms with nonfluctuating sales. There will be stretches at which various legal speed limits of less than 35 miles per hour will have to be observed if the driver does not wish to risk a possibly expensive and delaying discussion with a traffic police officer. Consequently, a plan for the whole trip that plotted average speeds for the various parts of the trip would be essential to avoid undertaking the impractical. In a business, seasonal factors make some months unprofitable and others highly profitable. Mere observance of the rate of return from month to month might lead to unwarranted pessimism and optimism with the changing seasons in the absence of a plan that allows for changing pace that will make the trip to profits successful for the whole period of the plan.

Sales

The control of sales and the control of expenses are equally essential if the planned profit is to be attained. Control of sales is also essential in

[1] J. H. Williams, *The Flexible Budget* (New York, McGraw-Hill Book Company, Inc., 1934).

conjunction with the control of the investment in assets to achieve that turnover of investment which will result in the maximization of profits. A level of expenses properly in line with budgeted sales quickly becomes excessive if sales are not kept up to the planned level. A constant check must be kept on sales because if a correction cannot be made quickly, corresponding changes will have to be made in the expense budgets and in those budgets which influence the amount invested in assets.

Even though the total dollar sales may equal or exceed those budgeted for the period, constant analysis of sales must be maintained. The sales budget is generally made up of estimates of sales of several products at specific prices. The budgeted sales may be attained, but certain products may have greatly exceeded estimates in units, while others have lagged. As different products have different margins of profit, this change in the kinds of sales will necessitate immediate changes in many of the estimated expenses unless the relative proportions of products sold can be brought back into line. Likewise, the total budgeted sales figure may be attained by the sales of more units at lower prices, which may entail a considerable reduction in actual as compared with budgeted profit. Alternatively, certain territories may have greatly exceeded their quotas, while results in other districts are disappointing. This change in distribution of the product might have no immediate effect on expenses or profits but would indicate the need for looking for defects either in the sales quotas set or in the performance of the sales organization. Once the real state of affairs is known, action can be taken to strengthen the weak links and hold the strong ones more securely.

The analysis and comparison of actual sales and expenses with anticipations will often require remedial action of one kind or another. The readjustment process may take various forms according to the particular circumstances, but as a general rule, the more promptly it is instituted, the better will be the results for the owners. Prompt attention to differences between actual and planned results may bring prompt amelioration of the trouble, or it may reveal that the budget estimates themselves were faulty and should be corrected or that uncontrollable circumstances have arisen which require revision of the budget. If the last is the case, the quicker the change in the budget is made, the smaller will be the amount of unnecessary expenses incurred, or the smaller the unnecessary investment in assets. The better the control, the higher will be the profits and the lower the required investment in assets to attain those profits.

Expenses

In a properly constructed budget the expenses set down in the individual schedules and departmental budgets are the best considered

judgments of the executives in charge of these departments. Once adopted, the expense rates and amounts set forth in these schedules should be used by the management as a limitation on the expenditures of the individual departments. By making provision in the budget program for periodic comparison of the actual results with that budgeted the management can keep a close watch on the operations of those in charge of the various functions of the business and call them to account for any expenses above those estimated.

These reports of actual operations might be daily, weekly, or monthly, depending on the importance of the expenditure, the chances of wide fluctuation from what was planned, and the difficulty and time involved in obtaining the data. There would be little advantage in getting frequent reports of rent or superintendence expenditures from various departments, as these items in most cases are not subject to much variation from month to month, nor are they likely to loom large in the total costs. On the other hand, more frequent reports might be very useful in the case of direct labor and raw material or merchandise costs, particularly where the market price of the latter might be subject to marked fluctuations, as in the case of agricultural products. The comparison of actual and budgeted sales might be made daily because of their importance to all other departments of the business.

If department heads are made to realize that the management is in earnest about the budget and that their compensation and chances to get ahead in the business will be measured in part by a comparison of the cost of their actual performance with that budgeted, there is little doubt that those responsible for the different operations of the business will use their best endeavors to keep expenses within control. In fact, as soon as there is reason for believing that they will not be able to keep within their budgets, they will be quick to go to their superior officer and let him know this fact; they will want to relieve themselves of at least some of the responsibility for an unsatisfactory showing. With prompt action, there is usually an opportunity for management to adopt preventive measures. On the other hand, economies effected are much more readily noted and appreciated where performance is being constantly compared with a plan of expenditure.

The idea of using the budget as a limitation of expenditures can be implemented by requiring the official in charge of a particular function to obtain specific authorization from his superior for any expenses he may incur in excess of those allowed in the budget. Such procedure would automatically call to the attention of the management discrepancies between the actual and the budgeted figures. To avoid unnecessary red tape, a blanket appropriation might be made for some groups of items and the

responsible person allowed a certain prescribed freedom in the details of expenditures so long as the budget limit is observed. Because of the time that might elapse before the budgetary appropriation was exceeded, this method might not be as close a control as frequent comparative reports.

For example, the appropriation for purchases of raw material for a particular budget period might be exhausted when only two-thirds of the period had elapsed because of too heavy stocking of one product. This fact would come to the attention of management only when the purchasing agent requested funds beyond his budget for materials required to maintain the scheduled production for the period. The specific method of control adopted would depend on the character of the business and the amount and kind of control the management felt were necessary.

Flexible Budgets

The usefulness in the control of sales and expenses of what is known as a "variable" or "flexible budget" was referred to briefly in Chapter 8. A flexible budget is one which provides estimates of expenses for varying levels of sales.

There are so many uncertainties surrounding the future demand for a business's products or services and the costs that will be incurred in furnishing them that most firms cannot consistently budget as far as one year ahead with a great deal of accuracy. At the time of preparing the budget for the forthcoming year, an estimate of sales and expenses is made that becomes the initial basis for controlling business operations.

However, as the year progresses, it may become apparent that some of the projected figures are quite inaccurate in view of changed conditions that were not anticipated when the financial plan was formulated. Unit sales may be well above or below those anticipated because of changes in business activity that bear directly on the demand for the firm's products. The forecast of unit sales may have been substantially accurate, but price cuts by competitors may force similar price reductions that will affect total dollar sales, or a seller's market may develop that permits increasing the profit margin by a price increase. Any number of factors can affect costs. These cost changes can result because of reasons that were unanticipated when the budget was originally set up or because the officers responsible for the budget made faulty judgments. Changes in the international picture have in recent years been responsible for frequent and violent changes in commodity prices of important raw materials. Labor costs have been subject to unpredictable changes because of industry-wide bargaining, labor shortages, and high turnover in many industries. Governmental regulation and tax changes have imposed cost burdens that are difficult to predict.

Whenever it becomes apparent that the budget figures are unrealistic in view of current conditions, it is futile to cling to these figures as standards for controlling operations. The best solution is to recast the budget to give effect to the changed conditions. Management will still strive to attain the maximum profit, although the original profit goal will be changed up or down by the new situation. The new sales and expense estimates now become the standards for controlling the firm's operation.

The flexible budget is a budgetary device used to facilitate changing the financial plan and to arrive at new, realistic (at the time of change) estimates to be used for control purposes. Without it, to draw up an entirely new budget every time a change in the sales outlook appeared would be time-consuming and costly. For these reasons careful budgeting would be less widely used, and the benefits of financial control that it provides would be lost.

To establish a flexible budget, it is necessary to divide all expenses into two major classes, variable and fixed. The variable costs are those which are directly related to volume, such as raw materials, direct production wages, and sales commissions. Fixed expenses are just that: they remain unchanged no matter what the change in volume. They represent the outlays that are necessary to maintain the organization through good times and bad. They include property and similar taxes, fixed depreciation, executive salaries, rentals, etc. Some common expenses do not conveniently fall into either class. Indirect labor, for example, might increase slightly, but not in direct proportion to increases in volume. With careful analysis, however, it is usually possible to divide such "semivariable" expenses into two parts, a fixed element and a variable element.

After the division of all costs into the two major groups is made, the ratio of each variable expense to a given selling price or level of selling prices is found. Thus for a given level of selling prices the major variable expenses might be found to be as follows:

	Per Cent
Raw material	22
Direct labor	17
Sales commissions	5
Advertising	2
Supplies	1
Total variable expenses	47

Assume that fixed expenses for a concern are determined to be $200,000 and that the estimated selling price is $1 per unit. Once the division of expenses has been made, it is a simple matter to budget total expenses and profit for varying estimates of sales volume.

TABLE 1

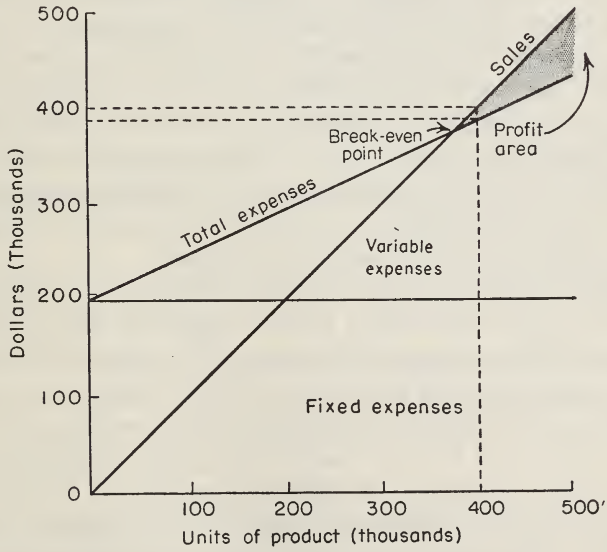
ESTIMATED ANNUAL SALES, EXPENSES, AND PROFIT

Sales	$350,000	$375,000	$400,000	$425,000	$450,000
Variable expenses (47% of sales) . .	$164,500	$176,250	$188,000	$199,750	$211,500
Fixed expenses . . .	200,000	200,000	200,000	200,000	200,000
Total expenses . .	$364,500	$376,250	$388,000	$399,750	$411,500
Profit or loss	−$ 14,500	−$ 1,250	$ 12,000	$ 25,250	$ 38,500

This summarized version of a flexible budget provides the data for a "break-even" chart (Exhibit II). Such a chart merely illustrates expenses at varying levels of output. It gets its name, because, among other things,

EXHIBIT II

"BREAK-EVEN" CHART



it shows a business's break-even point—the intersection of the sales and total expense lines. The chart facilitates the visualization of the effect on profits of changes in the estimates of volume, selling price, or fixed or variable expenses. For example, an increase in selling price, with fixed expenses, the variable expense ratio, and unit sales remaining the same,

would raise the inclination of the sales line in the diagram, widen the profit margin, and increase the dollars of profit. This chart also shows the effect of operating leverage, which was discussed earlier.

While the break-even chart provides an easy means of seeing the effect of changes in volume, sales, or fixed or variable expenses, the sales and expenses would have to be reduced to detailed dollar figures in the form of individual schedules and an estimated profit and loss budget as shown in the following chapter before they could be used for purposes of financial control. The flexible budget, by segregating the variable from the fixed expenses and the reduction of the former to percentages of sales, does facilitate the construction of the detailed schedules which become the basis for internal control.

Controlling the Investment in Assets

Management is not entirely free to decide the total amount to be invested in assets in any business, although, as will be seen, it has considerable latitude within certain limits. On the upper side there is a limit to the amount of funds that can be raised by any business whether it be a corner drugstore or the United States Steel Corporation. Creditors have financial standards that must be met by prospective borrowers before funds will be advanced. One of these, common to all borrowers, is that the owners have a sufficient investment to serve as a buffer against possible shrinkage of the assets. As the total amount of creditor funds is increased, the owners' investment becomes a shrinking percentage margin of protection. At some point all creditors will call a halt to further credit extensions unless the owners' equity is expanded.

The ability of each business to obtain additional ownership funds is also limited. To the extent that a business earns a profit the owners may choose to leave the earnings in the business. To attract additional equity capital, an enterprise must hold out to the new partners or stockholders a prospective rate of profit commensurate with the risk and control involved. At some point in every business the point of diminishing returns is reached where investment of additional capital will result in a lower average rate of return on the owners' equity. As more capital is added, the rate of return will finally reach a point where no additional new outside ownership funds can be obtained.

For the same reason present owners will tend to draw out all earnings when the prospective rate of return is low or nil. In some cases it may be practicable to retain earnings in the business even though the rate of return is much lower than could be obtained elsewhere. In these cases

something other than the immediate rate of return earned is the compelling factor.[2]

There are thus two sides to the question of the expansion of owners' investment.

1. Will it be profitable from the standpoint of the present owners?
2. If profitable to the present owners, can the funds be obtained?

The aim of the owners of a business enterprise is to obtain the greatest possible percentage return on their investment. They will attempt to raise more equity funds by adding more partners or, in a corporation, by selling stock to outsiders as long as they expect further investment will increase the return on their own funds already committed to the business. It is the expectation of larger profits that leads to expansion. Unfortunately, in many instances, the expected higher profits do not materialize either because of improper planning or because of a change in economic conditions.

The second point is: Can the new ownership funds be raised? Only a few words need be said on the subject here as the raising of equity funds is discussed in some detail in Chapter 21. The present owners of a concern may expect to obtain higher profits on their interest in the business with the addition of further investment, but it may be quite a different story to induce prospective investors to place funds in the business. These new investors must be offered the expectation of a return sufficiently high to compensate for the risk involved. It is generally true that the expectations of small business are poorer in the opinion of outsiders than in the opinion of the owners. For this reason it is typically difficult for small concerns to obtain equity funds. The owners are not willing to give prospective owners a sufficiently large share of the income to compensate them for the anticipated risk involved.

Another factor making equity financing difficult in small, closely held firms is the jealousy with which the owners guard their control. They are reluctant to share this control in many cases except on terms which the new owners will not accept.

[2] The railroads as a group since the war have earned little more than 3 per cent on their investment. Nevertheless, they have retained most of the net profits available for common stockholders rather than paying them out as dividends. They have been used to retire bonds and improve the property. Retirement of debt reduces risk of loss in case of future adversity, and property improvement serves to maintain the competitive status of the roads, not only among themselves, but as against outside carriers such as trucks, ship and barge lines, pipelines, busses, and airlines. Failure to retain a large share of present earnings might mean loss in the future of a large part or all of the present investment.

Even the ease with which large business raises equity funds varies with prosperity and depression. With earnings rising and prospects bright it is comparatively easy to sell common stock, but when earnings are declining and the economic outlook is black, it is virtually impossible to sell equity securities except at a prohibitive cost to the old owners. They would have to offer such a large share of the reduced income to the new owners that they would receive a relatively large reduction in the rate of return on their own investment.

On the other hand, there is a minimum of assets that any business must have in order to operate profitably. This sum varies from one firm to another, depending on the type of business. The door-to-door peddler must have a few dollars invested in samples to show the housewife if he is going to obtain orders; the local grocery store must have a minimum inventory on its shelves if it is to attract and hold customers; and a local transportation company must have a minimum number of streetcars and busses to provide adequate service.

However, between the upper limit of the ability to attract funds and the lower limit of having sufficient assets to operate, the financial management has free rein in determining what the total investment in assets will be. This total will be set by the financial management between these limits at a figure, which, in their best estimation, will return to the existing owners the greatest dollar profits over a period of time. The budget is one of the administrative tools, a financial one, used by management in making and carrying out this plan.

Likewise, the budget is just as much an instrument for control of the investment in assets as it is an instrument for control of expenses and sales as discussed in the preceding section. Both investment in assets and expenses represent the expenditure of cash funds. The investment in assets affects the end result, profit or loss, of the business operation in two ways: the kind and amount of investment (1) will affect the expenses of the business and (2) will determine the kind of operations which can be undertaken. The moment that funds are committed to the business enterprise, even before their investment in specific assets other than cash, costs are incurred. Borrowed money will cost a certain interest expense. More important, however, are the costs incurred by the investment of the funds in particular assets other than cash.

If the decision is made to place some of these funds in fixed assets, such as plant or equipment, the business automatically takes on certain expenses: depreciation, maintenance, insurance, and property taxes. If the decision is made to invest funds in inventories, expenses of storage, shrinkage, insurance, and property taxes are assumed. If funds are tied up in receivables, automatically the business must incur expenses of a

credit and collection department and bad debts. Thus a decision to invest funds in a business and the allocation of those funds among various assets will entail a number of operating expenses. The control of these expenses comes within that aspect of budgetary control taken up in the first section of this chapter.

The second aspect of control of asset investment is that since the total sum available is limited, it should be so committed as to permit the kind of operations that will be most profitable under the circumstances. Control of the amount of investment in particular assets can be exercised in much the same way as control of expenses is maintained, that is, by providing for constant comparison of actual with budgeted investment and taking prompt action to bring actual investment back into line when it deviates too far from that planned.

For concerns having detailed budgets similar to those shown in the following chapter, control of the investment in assets is maintained through observing the limits set forth in a limited number of schedules. A merchandising concern with a large percentage of its total investment in inventories would exercise control of this investment through careful watching of the exhaustion through sales of various kinds of stock and checking purchases to ensure against an excessive total commitment and against an unbalance in the different kinds of goods. Similarly manufacturing and merchandising concerns which characteristically have a fair proportion of total assets in receivables from customers would control this investment by careful supervision of credits granted and collections.

Formal control over the investment in fixed assets is executed through a capital expenditures budget. In even a small business, control by informal methods should apply the two checks: the first, suggested by Exhibit I, is that the total fixed investment should be reasonable in relation to sales volume in order to permit satisfactory turnover of investment so essential to earning a fair rate of return. Moreover, the depreciation on an excessive investment puts a heavy burden on the operating expenses. As time passes, any excessive investment will become a part of costs to the extent of depreciation and their burden will end only when the write-off is completed. Once assets are purchased, no element of "control" is possible till the period of depreciation is completed, except when there is a possibility of resale of the asset.

The second check is the fitting in of prospective fixed asset purchases to the over-all financial plan to be sure that the business either has the means of payment on hand or can be sure of financing that will avoid the threat of insolvency, or even of financial weakness growing out of the purchases.

Allocation of Funds among Various Categories of Assets

The total figure of the amount to be invested in assets is arrived at only after a careful analysis of the amount to be invested in each particular asset. However, the reverse is also true. The total must be kept within the ability of the business to finance. At least equally important as the sum total of the assets in determining the amount of profits which a business can make is the manner in which it allocates its resources among the various assets, including cash, receivables, inventories, plant, and equipment. An efficiently operated firm might obtain sales of $400,000 on a total asset investment of $100,000. On the other hand, a less efficiently run concern with too heavy an investment in inventory might require a total asset investment of $125,000 to obtain a like amount of sales. With the same margin of profit on sales, the return to the owners in the latter case would be less than in the former.

The relative liquidity of the various types of assets has an important bearing on the question of committing funds to them. Generally speaking, the less liquid the particular asset, the greater the risk in investing funds in it: (1) a shift of the funds to a more profitable use becomes more difficult, if not impossible, once they have been committed in less liquid form, (2) they cannot be so readily converted to debt-paying purposes in an emergency, and (3) withdrawal is usually more difficult if liquidation becomes desirable. In an earlier part of this book dealing with cash flow, attention was drawn to the varying rapidity of conversion of typical business assets into cash. The specific factors of risk attached to each class of asset are discussed in greater detail in the following sections. However, if there is a question of alternate uses of additional funds both yielding the same rate of return, the management is better advised to place the funds in the more liquid asset. Not only is there less danger of loss, but if it becomes advisable later to shift the proportion of investment in the various assets because of changed business conditions, the greater liquidity provides greater flexibility.

General Factors Affecting Investment in Assets

The ensuing discussion of the factors affecting the investment in assets may be conveniently divided into two parts, (1) those more or less general factors which affect the business as a whole, influencing not only the total investment in assets but also in some cases the relative proportions between the various assets, and (2) those more specific factors affecting the investment in a particular category of assets, such as receivables, inventory, or plant.

could increase sales and production up to the extent of capacity. A further increase in sales beyond present capacity, however, might require a more than proportionate increase in plant if a new building had to be purchased or new machines installed. Minor increases in sales might be handled with no increased investment in the current assets if it were possible to offset the normal tendency in this direction with increased efficiency in the handling of inventories, better control of credit, or increased sales for cash, better control of the cash flow, or other economies discussed in more detail in succeeding sections.

Initial Size and Scale of Operations

It is obvious that the amount of investment in assets depends on the size of the business as it is first launched and as it may grow through the years. Some businesses can start on a very small scale and may even remain small if it appears unwise to expand or if opportunities for expansion do not arise. Businesses likely to operate best on a small scale are those in the personal service or some merchandising fields, as in a shoe repair shop, a barbershop, or a newsstand.

Some types of business, such as public utilities and manufacturers of the "heavy industry" type, require a very substantial initial investment. They cannot be started on a small scale. The investment per mile in road and equipment for all railroads in the United States is over $100,000. It is impossible to launch a new railroad with a few hundred yards of track and see how the traffic develops. A good steel blast furnace has cost $20 million dollars in the past, and no one starts in the steel manufacturing business on a shoestring.

Price-level Changes

The general level of prices or, more specifically, the prices of goods and services that the concern buys and sells will have a substantial influence on the investment in assets. In a period of rising prices a firm must increase its total investment in assets in order to carry on the same physical volume of sales. Rising prices will affect the investment in different assets in varying degrees. As the firm increases the prices of the goods it sells in order to maintain its profit margin, its investment in receivables will tend to go up by a proportionate amount.

As the raw materials or merchandise the firm buys rise in price, the amount of funds it must tie up in inventories to maintain the same number of physical units will rise. As wage rates rise, dollar value of goods in process and finished goods inventories rise. The method of determining cost of inventory, discussed in some detail in Chapter 3, plus the rapidity of the inventory turnover will determine the time interval that elapses between the increase in suppliers' prices (and wage rates in a manu-

facturing concern) and an increase in the investment in inventory. The use of the first-in, first-out (FIFO) method would result in a comparatively rapid replacement of low-cost inventory with higher cost inventory in the accounting records and balance sheet. Whatever the form of accounting, the cost of the inventory is determined by market prices; but should the business use the last-in, first-out (LIFO) method, the inventory investment would show no rise in response to rising prices so long as the number of physical units on hand remained constant. (It is, of course, likely that some increase in inventory would occur because, during a period of rising price level, business activity is ordinarily stimulated and additional inventory units carried.) The difference between the first and more conventional method and the latter is that the investment in inventory appears less under the latter method during a period of rising prices. The difference in figures is charged into the cost of the goods sold instead of appearing in the asset inventories.

If a firm attempts to maintain any relationship between its minimum cash balance and its daily, weekly, or monthly cash disbursements, the higher prices of goods and services will require a proportionate increase in the minimum cash balance kept on hand if financial safety is not to be reduced.

Because of the long life of most of the fixed assets, a rising price level affects the investment in fixed assets only when they are replaced or added to, which is ordinarily at a slow rate. In a concern of any size some of the fixed assets wear out or become obsolete each year. When replaced, their cost is higher and the gross investment in fixed assets (before depreciation) is increased by the difference between the cost of the old and new asset. Thus over a period of years if the higher price level continues, the low-cost assets are gradually replaced by those of higher cost.

Because of the rapid turnover of the current assets as compared with the fixed assets, the amount invested in them is much more susceptible to substantial change when the price level changes than it is in the case of the fixed assets. The relative proportions of fixed and current assets in the particular concern would also have a bearing on the time of impact of price-level changes. Over a short period of time a retail establishment with a high proportion of the total assets in inventories and receivables would be forced to make a much more substantial increase in its total assets than would a public utility or service establishment, which typically has the bulk of its assets in the fixed category.

Availability of Funds

The availability of funds was discussed earlier as the factor generally setting an upper limit to the range within which management has the

power to determine the total investment in assets. It bears listing again under this heading of the general factors affecting investment in assets because in many cases it is the limiting factor to management's proposals to expand operations in one form or other.

It varies in importance in different situations and at different times. Unavailability is more often of consequence in new businesses than in old, in small firms than in large, and in periods of depressed business than in prosperity.

Most new businesses at their inception are of comparatively small size. Most are proprietorships or partnerships. As such they must depend for their initial capital on the savings of the owner-proprietor or a limited number of partners. The risk in a new business is high. It is difficult to interest others in the investment of funds unless they are to take part in the management. New enterprises are thus limited for the most part to the funds that the organizers have saved or can borrow from their immediate family or friends. Additional funds are usually impossible to raise until the business has established a record of stability and earnings.

As pointed out in Chapter 2, the risk attached to small business as a class is greater than that for larger firms. The fact that the area is one in which small firms, such as many of the personal service businesses and retail trade, can exist means that it is easy for competitors to enter it. The impermanence of the proprietorship and partnership forms of organization characteristic of small firms increases the hazard, although it should be remembered that the impermanence is more the result of dependence on the continued health and abilities of one or a few persons rather than the mere legal form of organization. The high risk found in most small firms limits the availability of funds. If they are to expand, they must rely to a great degree on reinvested earnings. Larger firms characteristically have greater permanence, better management, and better credit standing. As a result, they generally have open to them a greater variety of credit sources and readier access to the capital markets for ownership funds. The fact that larger firms tend to be corporations makes it easier for them to raise ownership funds because of the advantages of the corporate form, especially for the investor who expects to take no active part in management.

The willingness of creditors and owners of risk capital to advance funds varies with the state of business activity and the state of domestic and international political affairs. Thus an enterprise whose credit standing is quite satisfactory may find that its ability to obtain additional funds is changed from one period to the next. Even if it can still obtain additional funds for expansion or to maintain assets at their current level, it may

find that the price it has to pay in terms of return on the funds or control has been markedly changed by these outside conditions.

Attitude of Management

The conservatism of the financial management affects not only the proportion of the various assets but the total investment in assets as well. Is the management inclined to expand the business as rapidly as possible? Is there a strong desire to be the dominant enterprise in its particular line of business, perhaps at the risk of adopting some unwise policies that may later lead the firm into trouble? Or is the management satisfied for the concern to occupy its particular niche in the industry, turn out a first-class product or service, and expand only if it appears virtually certain that the increased facilities can be fully utilized into the indefinite future?

As to its effect on asset proportions, a conservative management will probably maintain a larger cash balance than absolutely necessary. It will be likely to hold to a minimum the investment in inventories which are subject to fluctuating market values, rather than varying inventories with the speculative outlook for prices. It will have a conservative credit policy, that is, it will extend credit very carefully and will impose strict collection methods so that its investment in receivables is held to safe limits.

Factors Affecting Investment in Specific Assets

Receivables

All businesses which sell their goods or services on credit have an investment in receivables included among their current assets. This investment does not represent an outlay of cash in the same sense as does the purchase of other current assets, but the results are the same. In effect, the seller has lent money to the buyer with which the buyer has purchased the goods or services. Thus it is appropriate to consider the amounts owed by customers, represented by receivables, as an investment which must be financed from owned or borrowed funds. The amount of this investment depends on several factors to be discussed below. In some businesses the investment in receivables is so small as to require no special attention; in others, financing this investment may constitute the most important financial problem facing management. In some businesses where the receivables are relatively small, their turnover has little bearing on the cash position; in others, the ability to meet cash expenses and maturing obligations may depend in large part upon the collection of receivables.

The relative importance of receivables as an asset, in so far as corporations are concerned, is seen in the following schedule, which shows, for nonfinancial corporations reporting balance sheets to the Bureau of Internal Revenue, the percentage of net receivables to total assets at the end of 1946:

NOTES AND ACCOUNTS RECEIVABLE AS PER CENT OF TOTAL ASSETS

Group	*Per Cent of Total Assets*
Construction	39.8
Trade	22.3
Manufacturing	14.0
Service	10.8
Mining and quarrying	10.1
Agriculture and related	8.8
Transportation and utilities	3.6

SOURCE: U.S. Treasury Department, *Statistics of Income*, 1946, Part 2, Table 6.

A glance at the percentage column shows that, in construction and trade, receivables bulk very large among the assets and are substantial for manufacturing companies. As would be expected, they are less important for service and transportation concerns and public utilities, where the typical customer pays cash and the bulk of the investment is in fixed assets. There is considerable variation among the different types of business within the trade and manufacturing groups. Representative subclasses in each group for 1946 showed the following proportions of accounts and notes receivable to total assets.

Group	*Per Cent of Total Assets*
Trade:	
Wholesale	28.7
Retail	16.2
Furniture and house furnishings	30.0
Building material, fuel, and ice	24.7
Apparel and accessories	17.4
Filling stations	13.3
Food stores	9.8
Eating and drinking	5.8
Manufacturing:	
Apparel and products	22.9
Lumber and timber	19.8
Textile mill products	14.7
Food and kindred products	12.3
Iron, steel, and products	12.0
Petroleum and coal products	9.1

SOURCE: U.S. Treasury Department, *Statistics of Income*, 1946, Part 2, Table 6.

A number of factors other than those already discussed determine the investment in receivables which a concern has on its books at any one time. These factors can be developed from a simple illustration. Suppose a concern sells all its products on credit and that the sales do not vary from month to month. Suppose further that all customers pay promptly 30 days after purchase and that there are no bad debts. Under these conditions receivables showing on the books at any one time will exactly equal 1 month's sales, that is, the sales in the preceding 30 days. But if there are any variations from the above conditions, the investment in receivables will differ from this amount. If part of the sales are made for cash, if the term allowed to customers result in payment before or after 30 days, if all customers do not pay their bills when due or if some default outright, or if the seller sells receivables to banks or finance companies, the investment will represent a figure greater or smaller than the above amount. These factors affecting the investment in receivables will be developed and discussed in turn.

The credit department is interested in eliminating poor receivables and keeping bad-debt losses low, but if its credit policy is too strict, sales will suffer. It is the function of the executive management to keep the sales and credit departments working together to produce the highest net profit. The sales department can help by educating customers in good credit habits; the credit department can help by "selling" the firm by cautious yet intelligent selection of risks and by collection policies which retain the maximum good will of the customers. Methods of analyzing credit risks and determining the amount of credit to be granted, as well as collection policies, are discussed later in the book.

Stability of Sales. In highly seasonal businesses, the investment in receivables rises and falls throughout the year with the rise and fall of credit sales. In a retail business allowing charge accounts or installment payments, the investment in receivables may be at its peak at the end of December, representing holiday purchases which will not be paid until January. Under these conditions the business may need to finance this peak investment in receivables by a loan from a bank or some other outside source.

Terms of Sale. The terms of sale allowed to customers will also affect the investment in receivables. Other things being equal, the shorter the terms, that is, the shorter the period of credit allowed, the smaller will be the percentage of sales represented by receivables. At one extreme, terms requiring cash at time of sale result in no receivables, while terms of six months given to and taken by all customers would result in receivables equal to six months' sales, provided all accounts were paid when due. If a cash discount is allowed for early payment, say in terms of

"2 per cent 10 days, net 30 days," some customers may take the cash discount, others may not; some customers may let the bill run until the thirtieth day, others may pay it earlier in the credit period. Thus the investment in receivables will reflect, along with other influences, the average time elapsing between date of billing and date of payment of all accounts, which is in turn the reflection of two factors, the terms of sale and the paying habits of customers.

Credit and Collection Policy and Experience. The investment in receivables is affected by the policies of the credit department in two ways, first, through the liberality of the original credit extension, and, second, through the results of collections. A very strict credit policy calls for rigid inspection of the credit risk and perhaps smaller credit sales to begin with. An efficient collection policy reduces the investment in slow accounts and increases the turnover of receivables.

Retaining vs. Sale or Assignment of Receivables. In Chapter 17 the practice of selling receivables to a factor or finance company or of assigning them as collateral for short-term loans with finance companies and banks is discussed in detail. Outright sale of receivables diminishes the investment in such items. A pledge or assignment does not alter the investment required but does, in effect, convert or turn a portion of the receivables into cash before maturity and may have many advantages to the business preferring immediate cash to the more gradual liquidation as the receivables mature.

Inventories

Efficient management of inventories demands that both over and underinvestment in these assets be avoided. Too much capital tied up in inventories results in a lowered rate of return and the possibility of substantial loss from decline in market value; too small an inventory is likely to reduce the volume of business and proper servicing of customers. A number of factors affect the investment in inventories.

Stability of Sales. In businesses with a seasonal fluctuation in sales, the necessary investment in inventory at any one time is affected by the timing and sharpness of the fluctuations. The seasonal peak varies greatly among different types of businesses and indeed within the trading or merchandising group itself. The department store must build up inventory in the fall for the peak pre-Christmas season as well as for the climatic seasons which influence purchases of such items as clothing. As the year passes, the seasonal peak investment in inventory will be converted into a peak investment in receivables (as we have seen in the previous section), if sales are made on credit, and then into cash as the receivables are collected. How these seasonal changes in inventory require-

ments affect the cash positions of the business and the problem of cash budgeting was discussed in the previous chapter.

Time Factors. In addition to the above, three "time factors" also influence the required investment in inventories:

1. *Time lag between purchase and manufacture.* Concerns which have to cure raw materials, such as tobacco manufacturers and furniture and other lumber-using firms, may have a considerable investment in raw materials or merchandise inventory pending ultimate processing or resale. The investment is also increased if stock must be purchased in quantity and transported long distances.

2. *Time consumed by manufacture.* In industries with a slow process of manufacturing or conversion, a large investment in work-in-process is required. This investment in work-in-process is affected not only by the time element but by the costs of manufacture added to the value of the raw materials.

3. *Lag between manufacture and sale.* The finished goods inventory of manufacturing concerns is affected by the length of the interval between manufacture and sale. If the period is very long, as may be the case where production is for stock rather than to order, substantial sums are tied up.

The three time factors noted above obviously affect the rapidity of inventory turnover, whose relation to profits has already been discussed. These represent factors for a manufacturing concern. In a merchandising business, the three points are telescoped into one, namely, the lag between purchase and sale. In a personal service business there is no purchase of goods, and so the lag, if any, would be between the payment of expenses necessary to the conduct of the business and the receipt of revenues from customers. In some cash businesses of this type the revenue is actually collected from customers before the heaviest expenses have to be paid.

Terms of Purchase. The purchasing agent must provide stocks sufficient to meet the demands of the sales department. But if the terms of purchase are favorable, he may take advantage of them to order more than the normal minimum requirements. Favorable terms might be represented by a substantial cash discount or by unusually long terms if a cash discount is not offered or taken.

Supply Conditions. The purchasing agent must also keep the conditions of supply in mind when building up inventory. If needed materials or merchandise are likely to become scarce, he will conduct forward buying to stock up in advance and the investment in inventories will be higher than usual, for a time at least.

Whether or not the supply is subject to control will also affect the buying policy. Concerns which own or control their sources of supply are

not under pressure to maintain more than the normal inventory, as they are assured of available materials or stock when needed.

Supply conditions are, of course, beyond the control of most businesses. During the Second World War, the disappearance of a great many lines of merchandise forced a reduction in purchases so that the inventories carried were kept subnormal in relation to sales, with the result that cash and receivables rose above their normal relationship to inventories.

Price Conditions. One element of price has already been discussed in connection with the required investment in inventories, that is, changes of investment caused by changes in the price level. Buying, and hence the investment in inventories, is also affected by opportunities to acquire stocks at bargain prices for large quantities or in a depressed market. Forward buying in anticipation of rising prices also causes temporarily large inventories but must be undertaken with care to avoid a later loss if the expected rise does not materialize and to avoid incurring current debt that cannot be paid promptly.

Cash

The subject of the control of the cash balance of a business was discussed at length in the preceding chapter. Since cash is one of the major current assets, some of the more essential ideas of the last chapter are restated here in this review of the factors determining the over-all asset investment.

If a concern could operate in such a manner that its cash receipts each day equaled its cash disbursements, there would be no need for carrying a cash balance. Unfortunately, from a financial point of view this situation is rare, existing only in perhaps an exceptional case like that of an occasional newspaper vendor. Because there is a lack of balance between the inflow and outflow of cash, all businesses must maintain a cash balance to protect themselves against periods when cash disbursements exceed cash receipts.

The size of the cash balance that should be maintained will depend on many factors. Some fairly predictable factors may contribute to the irregularity of the cash inflow and outflow in the normal course of the business; some factors are unpredictable, irregular, or of an emergency nature. Predictable factors that determine the regularity of receipts are the seasonableness of sales, the habits of customers in paying their bills, and the size of the individual sale. Predictable factors influencing regularity or lack of regularity of cash outflow are the purchasing practices of the firm—whether it buys frequently in small lots or intermittently in large lots—the frequency of wage payments, and the smoothness of the production schedule. The more even the flow of cash receipts and disburse-

ments, the smaller the cash balance that need be maintained. For example, an electric or telephone utility with regular cash receipts would normally have a comparatively small cash balance in relation to its cash flow, in contrast to a manufacturer building expensive machines on contract who is paid only as he completes each special job and whose sales are seasonal.

In most businesses management will wish to maintain a cash balance somewhat larger than that barely necessary to meet irregularities of cash flow arising from regular operations. The greater the risk of the business, the larger this "extra" cash balance should be. If there is a possibility of large inventory losses, or if sales are influenced greatly by weather, or if there is a possibility of labor trouble, there may be interruptions to cash receipts while the need for meeting many of the regular cash disbursements may continue.

After a concern has been in business for some time, the management is generally able to work out a rule of thumb as to a safe minimum cash balance to maintain. This rule is often developed in terms of cash expenditures for some future period of time. Thus a business may find from years of experience that it will be reasonably protected against insolvency if it maintains at all times a cash balance equivalent to the expected cash expenditures of the following month. Such a balance would permit the firm to operate for one month if for any reason its cash receipts were cut off.

Actually, many small businesses exist on a hand-to-mouth basis so far as cash is concerned. Such a precarious cash position explains one of the financial reasons as to why these small units are so susceptible to shock in the event of even slight adversity.

Fixed Operating Assets

Importance of Proper Management of Fixed Assets. One of the most important tasks of those in charge of the financial administration of a business is to determine the proper investment in fixed assets and devise a financial program which will provide the funds necessary for fixed assets at the right time and at the lowest cost. This fixed investment is expected through its operation to produce an adequate rate of return to the owners of the business. Insufficient plant or facilities of the wrong type hamper the operations and lower the returns, and excessive investment in unused or overexpensive facilities reduces the rate of return made from the really productive assets.

Proper control of the investment in fixed assets is also important because, as was indicated in the material on financial statements, such assets are ordinarily not liquid in the sense that their cost can be recovered

by sale in the market place. Very often the fixed assets are of a highly specialized character and are of value only if they can be operated for a specific purpose and at their particular location. Moreover, they are seldom of such a nature that they can be disposed of piecemeal. An unused blast furnace represents a large investment of specialized character. Its value can be reclaimed only through operation at the original site. Funds sunk in railroad roadbed and track are not transferable to some other use if they prove unproductive in the railroad business. A hydroelectric plant can be used only for electric power production. Any such assets must be used "as is" and cannot be broken up easily to reduce excess investment.

Not all fixed assets have the characteristics outlined above, but as a general class they constitute a relatively large commitment of funds expected to be used over long periods of time. Proper planning of fixed asset needs provides a severe test to financial management.

A special problem of concerns which have a large investment in plant, relative to sales, arises from the fact that such concerns are vulnerable to two special kinds of risks: first, the large fixed investment imposes relatively fixed costs such as depreciation, upkeep, insurance, property taxes, and interest which do not vary with revenues, and so such firms may feel the swings in the business cycle with special force; second, such firms with relatively long-lived assets are at the mercy of technological changes which may greatly reduce the value of the plant long before it wears out.

Table 2 illustrates the great variation in proportionate investment in the various assets between different types of business. This means that in some concerns the financial administration must devote much time and attention to the raising of funds for permanent facilities, whereas in others fixed asset financing is negligible or at least appears only intermittently in the life of the business. And the size of the investment in fixed assets affects not only the amount of financing to be done but also the form of financing, that is, the methods by which the funds needed by the business are raised—the question which will be discussed in detail in later chapters.

The various factors which determine the expenditures for fixed tangible operating assets (plant), other than the general ones which affect all assets, will now be discussed. Not all these factors are important for every business or for a particular business all of the time. Also, the distinction between the different kinds of expenditures must be kept in mind. There are four of these associated with plant and equipment, (1) repairs, which are expenses necessary to maintain the plant at ordinary production and which are charged to current expenses, (2) replacements, (3) better-

ments, and (4) additions, which are capital outlays. It is with the latter three that the following discussion is chiefly concerned.

Extent of Operations. The investment in plant will be determined by the scope of operations covered, that is, the vertical integration or lack of such integration present. A vertically integrated business is one which conducts the successive steps in the production of its product, rather than only a single stage or process. The integrated company will have a large proportion of its assets invested in plant and equipment and will normally require a large investment in operating assets per dollar of sales. As an example, one may cite the Ford Company in the automobile industry, making part of its own steel, glass, and tire requirements, as compared with the Chrysler Corporation, which buys from outside firms its entire requirement of these components.

Even though the concern is engaged in only one phase of production, it may curtail its investment in plant by subcontracting part of the process. The concern may find that other businesses which specialize in making certain parts can produce them more economically, at least until it has developed sufficient demand to warrant complete production.

Rent vs. Ownership. Small service and manufacturing concerns often lease equipment under short-term leases. Offices, stores, and, less frequently, factories are also acquired under short-term lease. By renting its store, its equipment, or its plant, the small business avoids the problem of financing the acquisition of such assets.

The orthodox base for calculating the rental of business locations is a fixed sum per square foot of floor space, but this method may be undesirable under either a long- or a short-term lease arrangement. An owner does not wish to offer a long-term lease on fixed terms if he feels that property values and rentals are on the increase. The merchant, on the other hand, stands to lose under a long-term lease if values and rentals are falling. Both parties may be better satisfied with a rental consisting of a certain percentage of the sales, a basis of payment which came into prominence in the 1930's for certain retailing concerns. Such a lease arrangement when formed is most likely to occur in that field and then only when the landlord has confidence in the business ability and the integrity of the accounts of the tenant. Chain-store tenant organizations have probably been the most frequent users.

Small manufacturing concerns which can use buildings of a nonspecialized type find that a short-term lease may be preferred to purchase or construction. If a special building is required, a long-term lease is necessary to protect the owner of the property. The owner may then be willing to construct the special premises, the improvements to be written off over the life of the lease. (In real estate, "improvements" includes

the building as well as inside alterations and so covers the total landlord's real-estate investment other than the bare land.)

Manufacturing and service concerns may obtain equipment without a large cash outlay by renting it from the manufacturer. Special accounting and statistical machines, as well as office equipment, may also be acquired in this fashion.

Long-term leases are commonly found in real-estate and railroad operation. In the field of real estate, leases of land for 99 years in some large cities are not uncommon. The lessee (renter) may construct a building on the leased land and finance the building by the sale of leasehold mortgage bonds secured by the building and the leasehold. The income from the rental of the building must cover the operating expenses, the rent of the land (ground rent), interest on the bonds, and the amortization (annual principal repayments) of the bonds. Failure to pay the ground rent would result in the landlord's seizing the improvements erected on his land, his claim being superior even to that of a creditor with a mortgage on the building.

In the railroad field, a substantial percentage of the mileage in the United States is owned by lessor companies but operated by other companies.

The use of the lease as a method of acquiring equipment has also had its greatest development in the railroad field. When most railroad rolling stock is acquired, it is not bought outright but leased from a trust company and when the last installment is paid, the railroad takes title. A similar arrangement is sometimes made for the users of manufacturing equipment. Such equipment leases are not true leases from a financial (as distinct from the legal) point of view but are installment purchases and ordinarily involve an initial down payment. Financial realism has prevailed in railroad accounting so that equipment so acquired is carried as an asset and the liability for unpaid installments as a liability, and the carrying costs (dividends on equipment trust certificates) appear like interest as a financial charge in the earnings statement.

Prospects of Growth; Extent of Unused Capacity. Concerns which expect to grow rapidly may have to make a substantial investment in fixed assets which will not be used to capacity for some time, because piecemeal additions to plant may not be feasible. For example, a hydroelectric project must be substantial enough to take care of the expected demand for power at its fullest development, which may not take place for some years after construction. A water company must lay mains which will be adequate for a greatly increased flowage to avoid having to tear up the streets later. And we have seen that some types of manufacturing require a very heavy initial investment in advance of possible capacity operation.

On the other hand, chain-store organizations can add additional units as the management sees fit.

Where unused capacity is acquired, some types of businesses are able to derive some income from the idle investment until the facilities are all needed in their own operation. Thus unused store space may be let out on concession and unused office, manufacturing, and storage space rented out on short-term leases.

Conservation of Existing Facilities. Before additional fixed assets are acquired, the management should be sure that effective use is now being made of the present facilities. Each foot of plant or store space should be put to the most effective use, and equipment should be selected and operated so as to derive the maximum production from its use. Poorly located or idle plant may be sold and the proceeds applied in the other branches of the business.

Major Replacements. Even though no major additions are planned, nearly every business has the problem of replacing the plant as it wears out (depreciation) or is rendered less useful by obsolescence. The replacements may be postponed during periods of inactivity, but if full and efficient production is to be regained, they must be made sooner or later. The financing requirements for such replacements will, of course, depend on the rate of depreciation and obsolescence and the cost of the new facilities. In some types of businesses, especially public utilities, there is a constant demand for new or replacement facilities necessary to provide adequate service to the community. Such concerns will include major replacements of plant in the budget estimates for every period.

Other Fixed Assets

In addition to the tangible operating fixed assets, or "plant," other assets belonging to the fixed assets group may have to be considered in planning the capital requirements of the business, including any investment in other companies for control purposes, and any intangible assets. The first type is not important for the small concern, but as the business grows, it may choose to expand by acquiring control of other concerns or by setting up subsidiaries rather than by direct growth. Or it may use this method along with direct expansion. The second type—intangibles—is found even among small concerns.

Permanent Investments in Other Concerns. The outlay for securities of controlled concerns depends on three factors, (1) the size of the controlling interest purchased ; (2) the price paid for the securities acquired, and (3) whether cash or securities of the purchasing concern are given for the securities acquired.

Investment in Intangible Assets. The assets which may be classed as "intangible" fall into two main groups, first, those representing values derived from superiority over other concerns, and second, those which represent long-term deferred expenses. The more common types are as follows:

1. *a.* Goodwill, or the capitalized value of superior earning power
   b. Trade-marks, trade names, patents, copyrights, franchises, or values derived from exclusive rights
2. *a.* Development costs or early deficits
   b. Organization costs

Conservative accounting practice insists that intangible assets be entered on the accounts at actual cost, and only when they have been bought and paid for. Thereafter, they may be written down slowly or rapidly, depending on the accounting practices followed.

The actual outlay for intangible assets acquired will, of course, depend on the importance of such items to the business and the means of payment. They may constitute the most important assets of one business and may never appear among the properties of another. Where cash is expended for intangibles, the outlay will be included in the capital additions budget, which itself forms part of the estimate of total cash receipts and disbursements.

The Cash and Financial Budgets as Aids to Financing

In Chapter 8, which described the nature and purpose of budgets and budgeting, it was stated that budgeting contributed to the control of the basic areas of business operation in three ways, (1) anticipating operating asset needs, (2) establishing standards by which to test current operating performance, and (3) planning for necessary financing. The chapter preceding the present one dealt with point 1 as it applied to the one important asset *cash.* The present chapter has up to now dealt with both points 1 and 2 as they bear upon the factor of profitability. Some brief attention must now be given to point 3.

Practically all concerns will at some time during their lives have to resort to additional financing in order to maintain adequate cash balances, and many of these have recourse to outside sources of funds continuously. These additional funds may be secured from owners or from creditors. It has already been noted that owners' funds, once secured, are generally a permanent addition to the capital of the business, although they may be reduced by operating losses or withdrawals, while the amount of

funds secured from creditors will fluctuate from time to time with the needs of the business and with the ability of the business to secure the advances. The cash and financial budgets are of immeasurable aid to management in planning and securing these funds and in retiring them from the business once the need for them has passed. Without the aid of these budgets, financing, when it can be accomplished, will tend to be haphazard and expensive and will contribute to a lower return for the owners than would otherwise be the case.

The advantages of the cash and financial budgets to management in planning for financing are fourfold:

1. The cash budget, by showing the estimated cash balance at the end of each subdivision of the budget period, will show *whether financing has to be undertaken at all or not.*

2. If the cash balance is not going to be adequate, these budgets show *when* the financing must be undertaken.

3. They will indicate the *amount* that must be raised.

4. They will indicate the *length of time* that the funds will be needed and, in doing so, will indicate the type of financing—short-, intermediate-, or long-term—that would be most logical. Concomitantly, they will indicate when surplus funds will be available to pay off the loan or retire an ownership investment of the preferred variety if that is used instead.

Knowing well in advance when funds will be needed, the management can shop around to find out where the necesary funds can be obtained on the most advantageous terms. It has time to compare not only the interest rates of various lending agencies but also other restrictions, such as pledge of assets to secure the loan, restrictions on further borrowing, requirements of minimum deposit, or endorsement of officers. A concern without a budget might be inadequately aware of the necessity of obtaining outside funds until the last minute. It is not unusual for a firm to reach the end of the month and find that its bank balance is insufficient to meet its payroll. It will have to secure funds perhaps on very short notice from whatever source is most readily available if it is able to secure them at all. In so doing, it may have to pay an exorbitant rate of interest and have its activities further curtailed by the onerous terms of the loan. With adequate planning the business might well have avoided the necessity of borrowing at all or at least have had time to arrange a loan on better terms.

The budget by revealing the approximate amount of funds needed will also avoid the possibility of borrowing more than is necessary. The reduction of an unnecessary interest expense will increase profits by a like amount. Or with inadequate planning too little might be borrowed, and

an added sum might be required at the last moment to tide the firm over its peak need, with the consequences described in the preceding paragraph.

Lack of proper planning as to the length of the period for which the funds are to be secured can be disastrous to the enterprise. Securing a 90-day loan when funds are required for a longer period only puts off for three months the day of reckoning. If the bank, finance company, or other lender will not renew the loan at the end of 90 days and if no other source of funds is available, the business will be forced into receivership or bankruptcy. Securing and retaining funds longer than necessary is not so likely to lead to the embarrassment of the business but results in an excessive payment of interest or dividends.

The presence of a budget not only permits the business to plan its financing in an orderly and economical fashion but also makes it easier to borrow. Generally speaking, a bank or other lending institution is more willing to lend, and lend on more favorable terms, to a concern that can present a budget when it applies for the loan showing how much will be required, what it will be used for, and when it can be retired. The mere fact that the business has a plan which it has put down in black and white instills confidence in the lender. Not only that, but the presence of a budget makes it possible for the lender to check on the progress of the business while the loan is still outstanding to see whether it is running ahead or behind the planned operations. The lender is able to gauge the profitableness of the loan to the borrowing concern and does not have to rely on vague hopes of the borrower. By permitting a business to apply for a loan well in advance of need, the budget makes it easier for lending institutions to plan the disposition of their own funds. If a bank knows on January 1 that one of its depositors will want a $50,000 loan on March 1, it is able so to arrange the maturities of its loans and investment that it will have the funds available on that date. If the same concern was to wait until February 24 or later to apply for the loan, the bank might have so committed its funds that it would be unable to make the advance even though there was nothing lacking as far as the credit standing of the would-be borrower was concerned.

The reader should not gain the impression that the presence of a budget is an assurance that a concern can secure the financing indicated as necessary by the budget. The budget, although extremely helpful in planning and obtaining financing, does not answer the questions:

Can the loan be obtained?
Where can it be obtained?
What will be the cost of the funds?

These are the subject matter of Parts IV and V of this book, dealing with the financing of the business. Even though the funds cannot be obtained, the budget if properly used makes the management plan for its cash needs far enough ahead so that if it finds that the indicated cash requirements are not available, it can revise the operating and sales program to function within the limits of the funds that are available.

Questions

1. What is management interested in controlling through the use of the budget?
2. How is the budget used in controlling sales or revenues?
3. How is the budget used in controlling expenses?
4. How does the budget serve to control the investments in assets?
5. What are the dangers of inadequate control over these investments?
6. What factors bear upon the aggregate size of the investment in assets? Elaborate.
7. Given the size of the investment in assets in general, what factors bear upon the relative size of the investment in particular assets? Elaborate.

    a. Receivables
    b. Inventory
    c. Cash
    d. Fixed assets

8. Can a business have too much cash? Explain.
9. Explain fully how cash budgets may contribute to the financing of asset requirements.
10. How does a flexible budget facilitate control?
11. What purpose is served by a break-even chart?

Chapter 11. THE DEVELOPMENT OF A DETAILED BUDGET

We have discussed the general nature and uses of budgets and budgeting in the preceding three chapters. The smaller and simpler the business, the less need there is for reducing to writing all the details of the financial plan of the management. But as a business becomes larger, it becomes more complex in organizational structure and there is an increasing need for setting down on paper the estimated receipts and expenditures, the anticipated profit results, and the planned financial condition at some future date. This chapter will show by illustration the type of information required and the type of forms used in the development of budgets for concerns with some complexity of organization.

Most business budgets, at least in the smaller concerns, are designed simply to control expenditures of cash. The businessman adds to the cash on hand the known or estimated cash income for the budgeted period, estimates the expected cash outlays for that period, notes the results, and attempts to govern himself or his business accordingly. The estimate of cash receipts and disbursements may be the only budget procedure followed and the only one that is really necessary.

In a business in which all sales are on a cash basis, all expenses are cash expenses, and the turnover period is very short, this primary emphasis on cash is appropriate. In other businesses where these simple conditions do not prevail, the forecast of cash receipts and disbursements and the laying of plans for obtaining any additional funds are still very important, but such a program does not serve all the complex needs of financial administration. Since businesses are conducted for profit, it is not enough to consider cash position alone; all items of income and expense must be combined in a forecast of the profits which will arise from an expected program of operations so that the business will have a means of controlling expenses and achieving the desired profit results. This is particularly so in the case of businesses which do not realize their cash receipts during or shortly after the act of purchasing, because of a considerable period of production or the use of credit, and of businesses in which there are many expenses of the noncash variety, such as depreciation.

The budget concept, then, is applied to both the idea of cash inflow and outgo and to gain and loss as is later reflected in the earnings statement. The former is broken down by items that affect the profit and loss statement as well as those which affect the balance sheet. Such a breakdown in

the cash budget suggests the beginning of that detailed analysis and departmentalization that appear and grow with a business of increasing size. As the work of the various parts of the business is turned over to specialized persons, these persons will have to aid in supplying information necessary for budget making and later will receive authority for seeing that the budget plan is carried out in their sector of the business. The individual supporting schedules that form the basis for the final summary budgets provide the means of controlling operations within these individual sectors of authority.

In order to illustrate the procedure involved in the development of a detailed budget the operations of a moderate-sized manufacturing company have been chosen. There is good reason for this. If a manufacturing business sells on credit, all the essential problems of budgeting are represented, whereas with a merchandising company an important area of manufacturing cost and control would not be covered adequately.

The treatment which follows necessarily does not cover all the detail going into the construction of a budget. To budget is to forecast, and the whole task of forecasting is one the accomplishment of which rests upon training, insight, and skills which encompass many whole areas of knowledge. To mention some of the more important ones, these include statistical method, market analysis, business cycle analysis, and economic analysis. What is more, once the forecast is accomplished, the very mechanical procedure of tracing it through the various departments and operations is sufficiently refined and complex to require whole treatment in text and course form.[1]

Our purpose here is to do no more than give the reader some appreciation of the type of forms used and the way in which the information, once derived, flows through the individual schedules to the four master budgets: the cash budget, the financial budget, the estimated profit and loss statement, and the estimated balance sheet. Therefore, in order to simplify our problem, we assume the really vital and fundamental information as given—that is, the expected sales schedule and the standard costs. By so doing we avoid the detailed complications of estimating future volume conditions, price changes, costs of raw materials and labor, competitive inroads, international relations as they affect the business scene, etc. These have all been taken into account in establishing the figures given below, but we shall not review the methods and intricate techniques followed. All that will be done in this regard is to give passing

[1] Some standard texts on budget procedure to which the student might turn for more elaborate treatment are John R. Bartizal, *Budget Principles and Procedure* (New York, Prentice-Hall, Inc., 1942); and John H. McDonald, *Practical Budget Procedure* (New York, Prentice-Hall, Inc., 1939).

attention at the time a schedule is introduced to general means by which the information contained therein might be derived.

It should also be pointed out that in further pursuit of avoiding unnecessary complications the following illustration has ignored many practical business difficulties in the way of variations in costs and production intervals over time. These simplifying assumptions, however, do not destroy the effectiveness of the case in accomplishing its essential objective of illustrating general form and procedure.

Data Assumed as Given

The A.B.C. Corporation manufactures a household utility which it sells at wholesale through exclusive distributors and at retail through its wholly owned subsidiary, the Miracle Utility Sales Company. The latter confines its operations to Illinois and Indiana. The company prepares a budget in June for the 12 months' operations commencing the following July. The sales estimate is shown in Table 1.

Table 1

Projected Sales

(In physical units)

Date	Miracle	Other distributors	Total
July	900	6,300	7,200
August	900	6,300	7,200
September	900	6,300	7,200
October	900	6,300	7,200
November	1,200	8,500	9,700
December	1,100	7,000	8,100
January	1,000	8,500	9,500
February	1,200	9,200	10,400
March	1,300	8,500	9,800
April	1,200	7,700	8,900
May	1,100	7,000	8,100
June	1,000	7,000	8,000
Total	12,700	88,600	101,300

Desired inventory of finished goods is 15 days' sales, but the company may be forced to reduce its inventory below this figure in order to achieve economies in purchasing and the production schedule. This explains the

reason for the inventory's not being shown at the desired figure in Exhibit V to follow. However, 2,000 units are currently on hand and represent the $45,740 figure shown in the beginning balance sheet (Exhibit I).

EXHIBIT I

A.B.C. CORPORATION

Estimated Balance Sheet, June 30[a]

Assets		*Liabilities*	
Cash	$ 249,418	Accounts payable	$ 63,200
Accounts receivable—distributors	252,000	Notes payable (due Nov. 15, 1948)	100,000
Notes receivable—installment	100,800	Federal income tax	144,000
Inventory:		Capital stock	200,000
Raw materials	86,900	Earned surplus	666,469
Finished goods	45,740		
Prepaid insurance:			
Equipment (to Sept. 30, 1951)	19,500		
Building (to Sept. 30, 1950)	3,510		
Fixed assets:			
Land	45,800		
Buildings $400,000 less reserve for depreciation $180,000	220,000		
Machinery $336,000 less depreciation $186,000	150,000		
Patents, good will, etc.	1		
Total assets	$1,173,669	Total liabilities	$1,173,669

[a] Since the budget is being prepared before June 30, the beginning balance sheet is necessarily an estimate.

Established retail price, $80 per unit.

Terms of sale. Miracle requires 30 per cent down payment with the balance payable in seven equal monthly installments. Cash buyers are given a 7 per cent discount, and one-half of the buyers are cash buyers.

Distributors purchase at 50 per cent discount F.O.B. factory with the terms of sale 30 days net.

Additional data on the company's planned operations follow:

At present an expansion program is under way involving additions to buildings of $50,000. (It is estimated that payments on this contract will be $15,000 in July, $15,000 in August, and $20,000 in September.) Additional machinery has been contracted for in an amount of $75,600 installed. Depreciation on Buildings is taken at the rate of 3 per cent;

machinery is depreciated in 7 years. Maintenance of equipment is 10 per cent per year. Present insurance policies expire September 30, 1950 and 1951. Additional insurance is to be purchased on October 1 in the amount of $900 for a 3-year building policy and $1,200 for a 1-year equipment policy. At present, capacity is 7,200 units per month; after September 30, capacity is estimated at 9,000 units per month.

Standard costs have been established as shown in Exhibit II.

EXHIBIT II

STANDARD COSTS AND OTHER EXPENSES

Raw materials:	
Material A	$ 1.50 per unit of product
Material B	3.00 per unit of product
Material C	0.75 per unit of product
Material D	0.40 per unit of product
Miscellaneous supplies	2.25 per unit of product
Total	$ 7.90 per unit of product
Direct labor	$10.00 per unit of product
Miscellaneous manufacturing expense	0.75 per unit of product
Power	1.10 per unit of product
Indirect labor	$120,960.00 per annum 1st quarter
Indirect labor	141,600.00 per annum 2d, 3d, 4th quarters
Building expense:	
Heat	33,500.00 per annum
Distributed $8,000 2d quarter, $16,500 3d quarter, $9,000 4th quarter	
Repairs, maintenance	$ 9,000.00 per annum
Light	12,000.00 per annum 1st quarter
Light	10,200.00 balance of year
Distributed $3,300 each 2d and 4th quarters; $3,600, 3d quarter	
Real-estate taxes	$6,450.00 per year payable Mar. 31
Building expense to be allocated as follows:	
Manufacturing expenses	80 per cent
Selling expense	10 per cent
General and administrative expense	10 per cent
Corporate Federal income tax	45 per cent
Other selling expenses are estimated:	
Commissions to salesmen	4 per cent of net sales to distributors
Commissions to salesmen	20 per cent of net sales to Miracle
Advertising	10 per cent of net sales
Miscellaneous selling expense	3 per cent of net sales
Salaries	$73,320.00 1st quarter
Salaries	84,318 per quarter, 2d, 3d, 4th quarters
Other expenses chargeable to administration are:	
Salaries	$300,000.00 per annum
Supplies and miscellaneous	3 per cent of sales

In order to secure prices indicated in Exhibit II, raw materials and supplies will have to be purchased in 4,000 unit lots. Minimum inventories of raw materials and supplies necessary to assure continuous production are 45 days' production. Terms of purchase are 2 per cent 30 days, net 60 days.

The company plans to maintain its present annual dividend of $40,000 payable quarterly on September 15, December 15, March 15, and June 15 at the rate of $10,000 per quarter.

The Preparation of the Budget

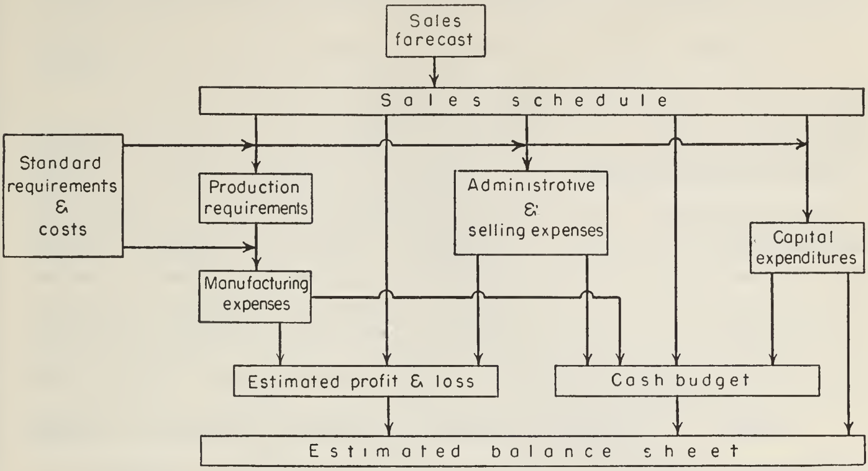
Before a final budget of expected cash flow can be constructed, the operation from which it is to be derived must be estimated, first in physical units, then in dollar terms. The preparation of a budget technically starts, then, with the sales estimate. This is the meat and substance of any budget, be it large or small. On the basis of this estimate of sales, the calculation progresses to production requirements, then to determining raw material requirements, thus to determining the costs of producing the product, on to the costs of selling the product, and finally to the costs of managing the business. In preparing the production requirements and costs, however, other basic information in the form of standard operations and costs must be given.

The difference between the sales revenue and the aggregate costs represents the estimated profits or losses from operations. These revenues, costs, and profits or losses are summarized in the estimated profit and loss statement covering the length of period desired. In addition, all transactions having to do with cash receipts or disbursements alone are summarized in the cash budget. From this statement any deficiencies or excesses in anticipated cash balance are treated in the financial budget. In other words, this latter budget is designed to show the timing and source of any new financing that may be required and the disposition of any surplus funds. The estimated balance sheet, finally, summarizes the anticipated balances in the real accounts resulting from all the projected transactions.

In order to get the most out of the material to follow, it might be advisable for the reader to go through the text entirely without referring to the individual schedules in order to get a general idea of the process and flow. Thereafter tracing the specific transactions through their respective schedules should be made easier, and appreciation of the forms and procedure used should be furthered thereby. Also, Exhibit III, illustrating the general flow of information in any more elaborate budgetary process,

Exhibit III

General Flow of Information in the Development of a Detailed Budget



should be helpful in developing perspective and avoiding the danger of getting bogged down by the details.

The development of the Sales Schedule, such as that illustrated in Exhibit IV, should be undertaken in close collaboration with the sales department. Generally, in forecasting sales for the coming year, the greatest reliance will be placed on the sales record of the past modified by any new conditions that may be present. The expected general business conditions should be given considerable weight. If the concern is large enough, it may have its own economist to study and forecast economic conditions, but more often the company will have to rely on the judgment of its executives based on information from trade sources, the Department of Commerce, the Board of Governors of the Federal Reserve System, and other government bureaus or secure its information from private economic services.

Moving from general conditions, an analysis will be made of the factors that will affect the sales of the company's products in particular. Included in the latter category would be expected price changes of the products, increases or decreases in the advertising appropriation, improvements in quality and styling, addition of new products, extension of sales territory, and changes of incentives to salesmen, such as quotas, commissions, and bonuses.

There are several methods found in practice for determining the estimated sales for the budget period. Any one or combination of them can be used.

Exhibit IV

Sales Schedule

Item	July	August	September	Total 1st quarter
Sales—Miracle—cash	$ 36,000	$ 36,000	$ 36,000	$108,000
Less cash discount 7 per cent	2,520	2,520	2,520	7,560
Net cash sales	$ 33,480	$ 33,480	$ 33,480	$100,440
Installment sales	36,000	36,000	36,000	108,000
Distributor sales	252,000	252,000	252,000	756,000
Total net sales	$321,480	$321,480	$321,480	$964,440

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Sales—Miracle—cash	$108,000	$ 128,000	$ 140,000	$ 132,000	$ 508,000
Less cash discount 7 per cent	7,560	8,960	9,800	9,240	35,560
Net cash sales	$100,440	$ 119,040	$ 130,200	$ 122,760	$ 472,440
Installment sales	108,000	128,000	140,000	132,000	508,000
Distributor sales	756,000	872,000	1,048,000	868,000	3,544,000
Total net sales	$964,440	$1,119,040	$1,318,200	$1,122,760	$4,524,440

1. The *historical method* (sometimes referred to as historical analogy) has already been mentioned briefly. Here primary reliance is placed on past sales as an indication of future sales. Often the individual salesmen are asked to submit estimates of their sales for the coming period. These, for the most part, will be based on their past performance modified by whatever limited knowledge they may have of expected business conditions and changes in their company's policies and products. These estimates are summed up by the sales department and revised in accordance with its more complete knowledge of company plans, industry prospects, and the general economic picture.

2. The *analytical method* involves breaking down the market for the company's product into geographical units and subunits. The market potential of each of these areas is then determined by an analysis of its total income, consumer expenditures, population, families, dwelling units,

department store sales, and whatever other information may have a bearing on the sale of the company product. Quotas or "expected" sales are then established for each area on the basis of this analysis. A standard of what may be expected in terms of a given market potential may be obtained from an analysis of past sales for an "average" territory.

3. Another method often used as a basis for the forecast when a change in line or operation is contemplated is *sampling the market.* In using this method a representative community may be selected where the product is offered for sale under conditions later to be extended throughout the whole market. Or the questionnaire survey method might be employed with or without samples of the product to be developed. A possible defect of this general approach is that the sample may not be representative. For one thing, competition is unlikely to react while a test is being conducted, whereas it might be forced to react if the policy were extended to the whole market area. Of course, salesmen in developing their estimates mentioned in method 1 may well use a partial sampling approach for guidance rather than rely solely upon past experience.

Occasionally a business contracts in advance for the sale of its products or services. If this is the case, the contracts establish future sales. Even then, unless contracts are made for a year in advance, estimates must be made for periods not yet contracted for.

It may be that not one but several alternate sales programs are outlined. The procedure then is to determine which programs can be carried out and which particular program offers the greatest profit and is within the financial means of the company.

Schedule of Production Requirements

Once the sales estimate or alternate sales estimates have been determined, the next step is to determine the quantity of product to be produced. This information may be provided in a Schedule of Required Production (Exhibit V).

It will be noted that the sales and production requirements sometimes differ. This, of course, is due to changes in the size of the inventory of finished goods. The size of inventory is an arbitrary figure determined partly by the need for delivery, *i.e.,* convenience; partly by the size of the economic run, *i.e.,* production requirements; and partly by the ability or willingness of the management to finance the inventory.[2]

The alternate sales programs are first converted into production requirements in terms of units of product. Allowances must be made for changes in inventory and for shrinkage or disappearance of inventory.

[2] For further discussion of these considerations return to the discussion of factors bearing upon the size of inventory in the preceding chapter.

Exhibit V

Schedule of Required Production

(In units)

Item	July	August	September	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Quantity to meet sales estimated	7,200	7,200	7,200	21,600	25,000	29,700	25,000	101,300
Add desired inventory end of period	2,000	2,000	2,000	2,000	4,000	1,300	3,300	3,300
Total	9,200	9,200	9,200	23,600	29,000	31,000	28,300	104,600
Less inventory, beginning of period	2,000	2,000	2,000	2,000	2,000	4,000	1,300	2,000
Required production	7,200	7,200	7,200	21,600	27,000	27,000	27,000	102,600

Production requirements are then sent to the production department, which will estimate the quantities of raw materials and supplies needed to produce the units required by the alternate production programs. These figures are then turned over to the purchasing department, which, after contacting suppliers, will decide whether or not the needed quantities of raw materials can be secured and indicate the probable costs of purchasing in various-sized lots.

The production department next determines the amount of direct and indirect labor needed to carry out the alternate programs, classifying the labor according to the degree of skill required. It would then be up to the personnel department to determine whether or not the required skills could be hired and the probable wage costs involved.

The task of budgeting material and labor costs is materially eased if standards have been worked out for every step in the manufacturing process. For material, standard costs are based on a fixed quantity of raw material per unit of finished product; and for labor, standard costs are determined on the basis of a fixed number of minutes for each class of labor per unit of finished product. Once costs are determined for each kind of material and each class of labor used, it is a simple matter of multiplication to arrive at the cost of production of any given quantity of

product. These standard costs may also be used as a device for control of expenses as explained in the preceding chapter.

The alternate production programs are also analyzed to determine whether or not equipment is available to produce the needed quantities. When doubt exists as to the ability to produce, it may be necessary to work out in detail for each man and machine an estimated production schedule. If the equipment is not available or changes in plant layout are indicated, it will be necessary to determine the desirable types of equipment and needed changes in plant layout and to estimate the probable costs of such capital expenditures. The needed changes are reported in the Capital Expenditures Budget, illustrated in a subsequent section of this chapter.

It may be that certain or all of the alternate programs will be unattainable because of bottlenecks in labor, raw materials, or lack of production facilities. If so, these programs must be revised or set aside. If a particular program appears financially desirable but temporarily physically or financially unattainable, it may be set up as a long-term objective of the company.

While the student of finance may not be particularly interested in the technique of determining the physical feasibility of a particular plan, he should appreciate its fundamental importance in arranging the over-all business program. It is through this type of detailed planning that men and machines are blended into a smoothly functioning unit and their activities dovetailed to eliminate waste motion. It is the essence of the idea of coordinating the activities of a business which is attained when the budget is properly used as an instrument of control. (Again see Chapter 10.)

Schedule of Raw Materials Requirements—Units

Given the production program scheduled above, the raw material requirements to fulfill such a program may be shown in a Schedule of Raw Materials Requirements (Exhibit VI).

In this schedule, requirements are set up for the period during which such raw materials are to be used, so that it will be necessary for the purchasing department to put in its order enough in advance of these dates to assure delivery as planned.

The quantity ordered will probably be determined by cost considerations, which in the case of most raw materials will often mean delivery in carload lots since small concessions in the price of raw materials loom large percentagewise in net profits. The interval between deliveries will be determined by the estimated minimum inventory needs. For purposes

Exhibit VI

Schedule of Raw Materials Requirements

(In units)

Item	July	August	September	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Inventory, beginning of period	11,000	11,800	12,600	11,000	13,400	14,400	15,400	11,000
Purchases	8,000	8,000	8,000	24,000	28,000	28,000	24,000	104,000
Total	19,000	19,800	20,600	35,000	41,400	42,400	39,400	115,000
Less used in production	7,200	7,200	7,200	21,600	27,000	27,000	27,000	102,600
Inventory, end of period	11,800	12,600	13,400	13,400	14,400	15,400	12,400	12,400
(Minimum requirements—next 45 days)	(10,800)	(10,800)	(12,000)	(12,000)	(13,500)	(13,000)	(12,000)	(12,000)

of inventory control in normal times, it is customary to set up a standard minimum inventory based upon considerations brought out in Chapter 10. An attempt is made to schedule deliveries so that the inventory never falls below this minimum.

Raw Materials Requirements—Dollar Value

The data in the Raw Materials Requirements Schedule are next converted into money units, as illustrated in Exhibit VII.

The reader should have it called to his attention at this time that (1) the dollar value of the raw material requirements is carried to the Schedule of Cost of Goods Sold (Exhibit XII), (2) year-end inventories to the balance sheet (Exhibit XX), and (3) purchase requirements to the purchase schedule (Exhibit VIII).

The Purchase Schedule

The purchase schedule (Exhibit VIII), which is the next to follow, is designed to show (1) purchase requirements and (2) debts assumed in the form of accounts payable. Given the conditions of the problem and the material in Exhibit VII, Exhibit VIII can be set up. The essential value of this particular schedule is that it establishes the periodic cash outlays on purchases, the discounts earned, and the outstanding accounts payable as of given dates.

Exhibit VII

Schedule of Raw Materials Requirements

Item	July	August	September	Total 1st quarter
Inventory, beginning of period	$ 86,900	$ 93,220	$ 99,540	$ 86,900
Purchases at $7.90 per unit	63,200	63,200	63,200	189,600
Total	$150,100	$156,420	$162,740	$276,500
Less used in production	56,880	56,880	56,880	170,640
Inventory, end of period	$ 93,220	$ 99,540	$105,860	$105,860

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Inventory, beginning of period	$ 86,900	$105,860	$113,760	$121,660	$ 86,900
Purchases at $7.90 per unit	189,600	221,200	221,200	189,600	821,600
Total	$276,500	$327,060	$334,960	$311,260	$908,500
Less used in production	170,640	213,300	213,300	213,300	810,540
Inventory, end of period	$105,860	$113,760	$121,660	$ 97,960	$ 97,960

It is assumed that the A.B.C. Corporation takes the 2 per cent cash discount by paying its suppliers' invoices on the thirtieth day, the end of the discount period. This is the first schedule on which a cash outlay has appeared. This sum is transferred to the Cash Budget (Exhibit XVII); Discount Earned, an item of income, is transferred to the Estimated Profit and Loss Statement (Exhibit XIX); and the Accounts Payable figure is entered into the Estimated Balance Sheet (Exhibit XX).

In many cases the Manufacturing Expense Schedule would be next in order in budgeting the principal expenses of a manufacturing business. This would be so if the company did not own its own building and avoided thereby certain subsidiary costs in the form of maintenance, insurance, taxes, and depreciation. Such costs would be combined in the single rental expense. Where the real estate used is owned, however, as is the case with the A.B.C. Corporation, it becomes necessary first to detail in subsidiary schedules these items of building expense.

Exhibit VIII

Schedule of Cash Outlay for Purchases

Item	July	August	September	Total 1st quarter
Accounts payable, beginning of period	$63,200	$63,200	$63,200	$ 63,200
Add: purchases, amount (Exhibit VII)	63,200	63,200	63,200	189,600
Deduct:				
Cash outlay	61,936	61,936	61,936	185,808
Discount earned	1,264	1,264	1,264	3,792
Balance of accounts payable	$63,200	$63,200	$63,200	$ 63,200

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Accounts payable, beginning of period	$ 63,200	$ 63,200	$ 63,200	$ 63,200	$ 63,200
Add: purchases, amount	189,600	221,200	221,200	189,600	821,600
Deduct:					
Cash outlay	185,808	216,776	216,776	216,776	836,136
Discount earned	3,792	4,424	4,424	4,424	17,064
Balance of accounts payable	$ 63,200	$ 63,200	$ 63,200	$ 31,600	$ 31,600

Schedule of Cash Outlays for Insurance and Real-estate Taxes

It is necessary to show the cash outlay for real-estate taxes and insurance in a separate schedule from that for building expense because while these two expenses are allocated to the over-all Building Expense Schedule on a monthly basis the cash payment occurs only once a year in the case of taxes and sometimes less frequently for insurance. They are a substantial drain on cash in the months in which they do occur and for that reason are set out separately so that their effect is sure to be reflected in the Cash Budget for those months. If, on the other hand, they were not prorated on a monthly basis, periodic profit estimation would be hampered. The Schedule of Cash Outlays for Insurance and Real-estate Taxes for the A.B.C. Corporation is given in Exhibit IX.

Schedule of Building Expenses

The problem of properly allocating general overhead costs is a most difficult one, and one of the principal costs of this type is the general

Exhibit IX

Schedule of Cash Outlays for Insurance and Real-estate Taxes

Item	July	August	September	Total 1st quarter
Taxes				
Insurance, building				
Insurance, equipment				
Total				

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Taxes	.....	.....	$6,450	.....	$6,450
Insurance, building	.....	$ 900	.....	.....	900
Insurance, equipment	.....	1,200	.....	.....	1,200
Total	.....	$2,100	$6,450	.....	$8,550

building operation. However, this is no place for delving into such complications. As with the allied problem of forecasting, it is a subject which may well constitute a course in itself, and it cannot therefore be developed in a survey chapter on budget development. The authors do want to caution, however, that budgetary cost allocations should be applied with the greatest of logic and judgment. Managers of divisions or departments working on a percentage of profit bonus are ever alert to the personal rewards paid to those who through persuasion of one sort or another succeed in having other departments bear the full or major share of a fixed expense burden. Unless top management is careful to see that equity is served in this regard, they might subsequently discover that certain of their budgetary efforts have, in fact, perverse effects.

In the present case, since the essential purpose is that of illustrating budgetary form alone, all allocations are handled on a simple, straightforward basis so as to avoid any needless complications on this score. The costs charged below to building operation, for example, are direct charges only; there is no allocation of financial or management expenses to this department.

It should be noted also that the usual practice of allocating expenses

on a flat monthly basis irrespective of the period in which the expense is incurred is followed in this illustration. The cash outlay for heat and light varies by quarters with the use of the service, but each month has been charged with an equal share of the total annual expense nonetheless.

Exhibit X

Schedule of Building Expenses

Item	July	August	September	Total 1st quarter
Heat				
Light	$1,000	$1,000	$1,000	$ 3,000
Repairs	750	750	750	2,250
Total cash outlay expense	$1,750	$1,750	$1,750	$ 5,250
Depreciation	1,000	1,000	1,000	3,000
Insurance	130	130	130	390
Taxes	500	500	500	1,500
Total expense	$3,380	$3,380	$3,380	$10,140
Allocated as rent to:				
Mfg. expense, 80%	5,137	5,137	5,138	15,412
Selling expense, 10%	642	642	642	1,926
Gen. administrative expense, 10%	642	642	642	1,926

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Heat	.....	$ 8,000	$16,500	$ 9,000	$33,500
Light	$ 3,000	3,300	3,600	3,300	13,200
Repairs	2,250	2,250	2,250	2,250	9,000
Total cash outlay expense	$ 5,250	$13,550	$22,350	$14,550	$55,700
Depreciation	3,000	3,375	3,375	3,375	13,125
Insurance	390	465	465	465	1,785
Taxes	1,500	1,650	1,650	1,650	6,450
Total expense	$10,140	$19,040	$27,840	$20,040	$77,060
Allocated as rent to:					
Mfg. expense, 80%	15,412	15,412	15,412	15,412	61,648
Selling expense, 10%	1,926	1,927	1,927	1,926	7,706
Gen. administrative expense, 10%	1,926	1,927	1,927	1,926	7,706

Schedule of Manufacturing Expenses

The purpose of the Manufacturing Expense Schedule (Exhibit XI) is to show the estimated costs attributable to the actual conversion of raw materials into the finished product. Indirect costs, such as the costs of management, financing, etc., are therefore not included. On the other hand building expense is allocated periodically to take the place of rent.

EXHIBIT XI

SCHEDULE OF MANUFACTURING EXPENSES

Item	July	August	September	Total 1st quarter
Direct labor at $10	$ 72,000	$ 72,000	$ 72,000	$216,000
Misc. mfg. expense at $0.75	5,400	5,400	5,400	16,200
Power at $1.10	7,920	7,920	7,920	23,760
Indirect labor	10,080	10,080	10,080	30,240
Maintenance—equipment 10%	2,800	2,800	2,800	8,400
Total cash outlays	$ 98,200	$ 98,200	$ 98,200	$294,600
Rent (Exhibit X)	$ 5,137	$ 5,137	$ 5,138	$ 15,412
Depreciation—equipment	4,000	4,000	4,000	12,000
Insurance—equipment	500	500	500	1,500
Total noncash expense	$ 9,637	$ 9,637	$ 9,638	$ 28,912
Total mfg. expense	$107,837	$107,837	$107,838	$323,512

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Direct labor at $10	$216,000	$270,000	$270,000	$270,000	$1,026,000
Misc. mfg. expense at $0.75	16,200	20,250	20,250	20,250	76,950
Power at $1.10	23,760	29,700	29,700	29,700	112,860
Indirect labor	30,240	35,400	35,400	35,400	136,440
Maintenance—equipment 10%	8,400	10,290	10,290	10,290	39,270
Total cash outlays	$294,600	$365,640	$365,640	$365,640	$1,391,520
Rent (Exhibit X)	$ 15,412	$ 15,412	$ 15,412	$ 15,412	$ 61,648
Depreciation—equipment	12,000	14,700	14,700	14,700	56,100
Insurance—equipment	1,500	1,800	1,800	1,800	6,900
Total noncash expense	$ 28,912	$ 31,912	$ 31,912	$ 31,912	$ 124,648
Total mfg. expense	$323,512	$397,552	$397,552	$397,552	$1,516,168

It should be noted that direct labor, contrary to the usual practice, is not treated as a separate budget schedule in the present case. It is usually convenient to set up a separate schedule of direct labor costs as was done with raw materials and the building expenses, particularly if many grades of labor, working at different hourly wages, are used in producing the product. The technique of estimating such costs is to multiply the number of units to be produced by the separate standard labor hours per unit of product, which process gives the total standard labor hours of each grade of labor. The latter multiplied by the respective money rate provides the estimated labor cost for the particular grade of labor, and the sum of the separate classes of labor are added to obtain the total direct labor costs. When this procedure is used, direct labor costs may be carried directly to the Estimated Cost of Goods Sold Schedule rather than indirectly through the Manufacturing Expense Schedule. In the present case, however, this added complication has been avoided by assuming only one item and grade of labor, and the resulting Schedule of Manufacturing Expenses is obtained.

Schedule of Cost of Goods Sold

The Schedule of Estimated Cost of Goods Sold (Exhibit XII) serves as a summary for several of the individual costs already developed and becomes thereby an intermediate stage in the development of the master budgets. It is both a supporting schedule and a final summarization.

Attention should be called to the fact that in the present case the method of valuing the inventories is first-in, first-out (FIFO).

The information contained in this summary schedule is not used in the preparation of the Cash Budget, but it is used in the preparation of the estimated Profit and Loss Statement (Exhibit XIX) and Estimated Balance Sheet (Exhibit XX).

Schedule of Selling Expenses

The estimated selling expenses are also summarized in both cash and noncash form. The reason for a separate schedule of this sort is that the sales department is one of the major centers of executive responsibility and action and therefore requires special control. Often, as with the Schedule of Manufacturing Expenses, this schedule represents a consolidation of several separate subsidiary schedules. For example, there may be separate products and/or geographic divisions subject to intermediate executive control, and so there would be need for a breakdown of the aggregate statistics along these lines. As pointed out before, however, complicating conditions of this sort have been avoided in the present

Exhibit XII

Schedule of Estimated Cost of Goods Sold

Item	July	August	September	Total 1st quarter
Raw material required (Exhibit VII) . .	$ 56,880	$ 56,880	$ 56,800	$170,640
Other mfg. expense (Exhibit XI)	107,837	107,837	107,838	323,512
Total cost of production	$164,717	$164,717	$164,718	$494,152
(Unit cost of production)	(22.87)	(22.87)	(22.87)	
Opening inventory (balance sheet) . . .	45,740	45,740	45,740	45,740
Total	$210,457	$210,457	$210,458	$539,892
Less closing inventory	45,740	45,740	45,740	45,740
Cost of goods sold	$164,717	$164,717	$164,718	$494,152

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Raw material required . . .	$170,640	$213,300	$213,300	$213,300	$ 810,540
Other mfg. expense	323,512	397,552	397,552	397,552	1,516,168
Total cost of production . .	$494,152	$610,852	$610,852	$610,852	$2,326,708
(Unit cost of production) .	....	(22.62)	(22.62)	(22.62)	
Opening inventory	45,740	45,740	90,480	29,406	45,740
Total	$539,892	$656,592	$701,332	$640,258	$2,372,448
Less closing inventory . . .	45,740	90,480	29,406	74,646	74,646
Cost of goods sold	$494,152	$566,112	$671,926	$565,612	$2,297,802

case, and so only the single Schedule of Estimated Selling Expenses (Exhibit XIII) is presented.

Schedule of Estimated General and Administrative Expense

The expenses incurred by other than the production and sales departments directly are summarized in the Estimated General and Administrative Expense Schedule (Exhibit XIV). Those expenses which entail cash expenditure are always subtotaled, as with the Manufacturing and Selling Expense Schedules, to facilitate forwarding to the Cash Budget.

Exhibit XIII

Schedule of Estimated Selling Expenses

Item	July	August	September	Total 1st quarter
Commissions—salesmen:				
Installment contracts at 20%	$ 7,200.00	$ 7,200.00	$ 7,200.00	$ 21,600.00
Cash sales Miracle at 20%	6,696.00	6,696.00	6,696.00	20,088.00
Distributor sales at 4%	10,080.00	10,080.00	10,080.00	30,240.00
Advertising at 10% of sales	32,148.00	32,148.00	32,148.00	96,444.00
Sales supervision at 3%	9,644.40	9,644.40	9,644.40	28,933.20
Salaries	24,440.00	24,440.00	24,440.00	73,320.00
Total cash expenses	$90,208.40	$90,208.40	$90,208.40	$270,625.20
Rent (Exhibit X)	642.00	642.00	642.00	1,926.00
Total selling expense	$90,850.40	$90,850.40	$90,850.40	$272,551.20

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Commissions—salesmen:					
Installment contracts at 20%	$ 21,600.00	$ 25,600.00	$ 28,000.00	$26,400.00	$ 101,600.00
Cash sales Miracle at 20%	20,088.00	23,808.00	26,040.00	46,552.00	94,488.00
Distributor sales at 4%	30,240.00	35,880.00	41,920.00	34,720.00	141,760.00
Advertising at 10% of sales	96,444.00	111,904.00	131,820.00	112,276.00	452,444.00
Sales supervision at 3%	28,933.20	33,571.20	39,546.00	33,682.80	135,733.20
Salaries	73,320.00	84,318.00	84,318.00	84,318.00	326,274.00
Total cash expenses	$270,625.20	$314,081.20	$351,644.00	$315,948.00	$1,252,299.20
Rent (Exhibit X)	1,926.00	1,927.00	1,927.00	1,926.00	7,706.00
Total selling expense	$272,551.20	$316,008.20	$353,571.00	$317,874.80	$1,260,005.20

Exhibit XIV

Schedule of Estimated General and Administrative Expense

Item	July	August	September	Total 1st quarter
Supplies, etc., 3%	$ 9,644.40	$ 9,644.40	$ 9,644.40	$ 28,933.20
Salaries	25,000.00	25,000.00	25,000.00	75,000.00
Total cash expense	$34,644.40	$34,644.40	$34,644.40	$103,933.20
Rent	642.00	642.00	642.00	1,926.00
Total expense	$35,286.40	$35,286.40	$35,286.40	$105,859.20

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Supplies, etc., 3%	$ 28,933.20	$ 33,571.20	$ 39,546.00	$ 33,682.80	$135,733.20
Salaries	75,000.00	75,000.00	75,000.00	75,000.00	300,000.00
Total cash expense	$103,933.20	$108,571.20	$114,546.00	$108,682.80	$435,733.20
Rent	1,926.00	1,927.00	1,927.00	1,926.00	7,706.00
Total expense	$105,859.20	$110,498.20	$116,473.00	$110,608.80	$443,439.20

From the point of view of the control of expenses (as suggested in the preceding chapter), those depicted in this schedule might well be broken down by each separate general supervisory department depending upon the managerial level of organization under consideration. It has been suggested [3] that all expenses directly attributable to a given departmental level, and absolutely subject to the control of that level, be allocated to that department and that the administrative head of such department be held responsible for expenses incurred. The problems involved are primarily problems for the cost accountant or specialist in problems of management and therefore not the province of financial management and are mentioned only to depict the concern of finance with the operations (and operating efficiency) of the business unit. Again extended complications of the sort have been avoided and mention made of the point so that the

[3] James O. McKinsey and Stuart P. Meech, *Controlling the Finances of a Business* (New York, The Ronald Press Company, 1923).

reader will recognize the essential form followed and yet not be led into a false sense of general competence.

Capital Expenditures Budget

After the estimated operations of a business have been broken down by individual departments and expressed in the separate schedules, anticipated outlays for plant, equipment, patents, etc., must be recorded in order to give attention to the need for providing cash for these relatively long-lived asset requirements. In a going concern they may amount to little or nothing unless expansion is contemplated. But with a new concern they will constitute one of the major cash drains. In the present case some addition to the building and purchase of equipment is planned and so must be expressed in a Capital Expenditures Budget (Exhibit XV).

Exhibit XV

Capital Expenditures Budget

Item	July	August	September	Total 1st quarter
Building addition	$15,000	$15,000	$20,000	$ 50,000
Machinery	......	......	75,600	75,600
Total	$15,000	$15,000	$95,600	$125,600

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Building addition	$ 50,000	.....	.....	.....	$ 50,000
Machinery	75,600	.....	.....	.....	75,600
Total	$125,600	.....	.....	.....	$125,600

In many cases the Capital Expenditures Budget will extend over a much longer period of time than one year. The introductory chapter of this section (Part III) explained that long-term forecasts are necessary for control over fixed asset policy. These forecasts will then be converted into tangible form through the Capital Expenditures Budget. Beyond the first year, however, the estimates will be expressed on an annual basis only rather than subsidiary quarterly and monthly intervals. If the forecast goes beyond 5 years, the estimates might be expressed in terms of

still longer intervals, such as 3 or 5 years. Some companies, like American Telephone and Telegraph, have been known to plan for capital expansion as far ahead as 20 and 25 years.

The Cash Budget

It has been pointed out that the first, and in many cases the most important, task of the financial management of a business is to maintain a cash position adequate for the normal and, as far as possible, the extraordinary needs of the business. The cash balance is fed from the conversion of other assets into cash, and the financial administration must check constantly the rate at which these other assets produce the cash flow. The other departments of a business are concentrated on operations which will make for profits; and while the financial administration is also interested in the profit results, it must lay primary emphasis on solvency.

Chapter 9 illustrated how cash needs might be estimated in a very general way for the purpose of preserving this solvency. The present chapter has now illustrated how the detailed operations of a business might be estimated and with them the associated cash flow. By summarizing all the anticipated cash receipts and disbursements contained in the previous supporting schedules a detailed cash budget may be created. Before constructing it, however, one further supporting schedule must be made. It is the schedule of receipts from sales, which is based upon the original estimate of sales volume, the proportion of cash and credit sales, and the collections on account.

Schedule of Estimated Collections from Cash Sales and Accounts and Notes Receivable

Cash receipts arising from operations consist of cash sales and collections of receivables representing past credit sales. The distribution of cash receipts from sales throughout the budget period will depend upon (1) the regularity of total sales, (2) the proportions of cash and credit sales, (3) the terms of sale, and (4) the amounts collected on receivables. Businesses selling only for cash will be affected only by the first of these factors. Whereas some concerns enjoy a stable income, others are affected by seasonal influences. The estimates of cash sales, like those of credit sales to be discussed below, are drawn from the original sales schedule.

If all sales are made for cash, the estimated sales, as shown in the sales schedule, would show up in the cash budget as the cash receipts from that source. If there is a lag between sales and collections, the problem is more difficult. However, once the sales schedule is determined, collec-

tions of receivables can be estimated without much difficulty. The terms of sale and the collection policies pursued will determine each month's or period's collections, keeping in mind the collection record in the past. At the beginning of a budget period the percentage of credit sales normally uncollected can be applied to the estimated credit sales for that period. This estimate of uncollected credit sales can then be subtracted from the total estimated credit sales figure. To the resulting figure the collections from the receivables outstanding at the beginning of the period are added, and the estimated total collections for the period are then known. The calculations can be set up in the following schedule, on an annual basis:

Estimated per cent of sales uncollected:		
Credit sales for the previous year		$..........
Accounts receivable, end of previous year		$..........
Per cent of sales uncollected		....
Estimated collections:		
Receivables, end of previous year (less reserve for bad debts)		$..........
Estimated credit sales, budgeted year	$..........	
Less estimated credit sales uncollected	$..........	$..........
Estimated collections, budgeted year		$..........

Smaller concerns may be able to estimate periodic collections by taking each customer's account and estimating the sales and collections which will be made during the budget period. In larger businesses with many customers, group figures and average performance must be utilized as shown.

The problem is still more difficult where there is a seasonal fluctuation in sales and therefore in collections, as with the A.B.C. Corporation. Under these conditions a schedule should be prepared showing the estimated sales for each month and the estimated collections per month. In this case the individual monthly collections may be calculated by applying a standard rate of collection to the varying sales figures. If there is a seasonal factor in the bad-debt and delinquency experience as well, then this too will have to be provided for in a variable collection rate based upon past operations. An example of this type of detailed schedule is provided for the A.B.C. Corporation in Exhibit XVI.

Form of Presentation

Like all budgets, cash budgets can be simple or complex, depending on the size and nature of the budgeting business and the desire for detail. Their nature is also affected by the system of accounts used in the business. At the one extreme is the budget of the small concern which operates on a cash basis and keeps simple records; at the other is the budget of the

Exhibit XVI

Schedule of Estimated Collections from Cash Sales and Accounts and Notes Receivable

Item		July	August	September	Total 1st quarter
Rec. from cash sales (Exhibit IV)		$ 33,480	$ 33,480	$ 33,480	$100,440
Rec. a/c distributors (previous month's sales) (Exhibit IV)		252,000	252,000	252,000	756,000
Rec. from installment sales and contracts:	Balance				
December	$ 3,600	3,600	.....	.....	3,600
January	7,200	3,600	3,600	.....	7,200
February	10,800	3,600	3,600	3,600	10,800
March	14,400	3,600	3,600	3,600	10,800
April	18,000	3,600	3,600	3,600	10,800
May	21,600	3,600	3,600	3,600	10,800
June	25,200	3,600	3,600	3,600	10,800
	$100,800				
	Sales				
July	$ 36,000	10,800	3,600	3,600	18,000
August	36,000	......	10,800	3,600	14,400
September	36,000	......	......	10,800	10,800
October	36,000				
November	48,000				
December	44,000				
January	40,000				
February	48,000				
March	52,000				
April	48,000				
May	44,000				
June	40,000				
	$508,000				
Total receipt installment sales		$ 36,000	$ 36,000	$ 36,000	$108,000
Total cash receipts		$321,480	$321,480	$321,480	$964,440

Item		Total 1st quarter	2d quarter	3d quarter	4th quarter	Bal. a/c rec.
Rec. from cash sales		$100,440	$ 119,040	$ 130,200	$ 122,760	
Rec. a/c distributors (previous month's sales)		756,000	844,000	988,000	928,000	$280,000
Rec. from installment sales and contracts:	Balance					
December	$ 3,600	3,600				
January	7,200	7,200				
February	10,800	10,800				
March	14,400	10,800	3,600			
April	18,000	10,800	7,200			
May	21,600	10,800	10,800			
June	25,200	10,800	10,800	3,600		
	$100,800					
	Sales					
July	$ 36,000	18,000	10,800	7,200		
August	36,000	14,400	10,800	10,800		
September	36,000	10,800	10,800	10,800	3,600	
October	36,000	......	18,000	10,800	7,200	
November	48,000	......	19,200	14,400	14,400	
December	44,000	......	13,200	13,200	13,200	4,400
January	40,000	......	......	20,000	12,000	8,000
February	48,000	......	......	19,200	14,400	14,400
March	52,000	......	......	15,600	15,600	20,800
April	48,000	......	......	......	24,000	24,000
May	44,000	......	......	......	17,600	26,400
June	40,000	......	......	......	12,000	28,000
	$508,000					
Total receipts—installment sales		$108,000	$ 115,200	$ 125,600	$ 134,000	$126,000
Total cash receipts		$964,440	$1,078,240	$1,243,800	$1,184,760	

large and highly functionalized business in which items of cash receipts and disbursements are drawn from a variety of departmental estimates and in which a large number of corrections for noncash income and expenses must be made.

Cash budgets can also be classified as to the length of the budgetary period concerned. Small businesses and those which lack a comprehensive budgeting system will use a relatively short period, say of 1 to 12 months. The short period has the advantage of greater accuracy. Many businesses, however, use a longer term budget as a basis of general financial policies and break it down by months or quarters, projecting figures for 1 month at the end of each month. The long-term budget is useful for determining the asset requirements of a long-range program so that financing can be arranged in advance. The short-term budget is necessary as the main basis for determining cash needs for the near future in connection with the current operations of the business. The length of the period covered by the cash budget will, of course, also be affected by the period used in the general budgetary program.

Regardless of the simplicity or complexity of individual cash budgets or the length of time they cover, however, they all adhere to a common fundamental form. That is to start off with a beginning balance, add to it anticipated receipts, subtract from it anticipated disbursements, and arrive at a final balance to be compared with the predetermined minimum requirement. This fundamental form has already been illustrated in Chapter 9 on a simple scale. It can now be used in connection with our immediate problem on a somewhat more elaborate basis.

In some cases, like that of the A.B.C. Corporation, this over-all cash budget may be divided into two parts, the so-called "cash budget" and "financial budget." The former will deal only with anticipated receipts and disbursements, and the latter will show the change in cash balances. The limited form of cash budget, in other words, will record only the anticipated cash transactions resulting from operations, and the financial budget will show the net effect of these upon the beginning cash balances. Accordingly, the financial budget is the tool of financial management for showing how deficiencies of cash are to be made up or excess cash is to be distributed or invested. It shows the over-all financial plan for raising funds through debt or ownership arrangements and the plan of management for any retirement of such debt. Its arrangements are based upon final balances that would result from the data contained in the over-all cash budget. Where a balance would drop below the minimum requirement, previously determined, the need for additional financing is required. And where a balance becomes greatly excessive, decision as to its disposition must be made.

Exhibit XVII

Cash Budget

Item	July	August	September	Total 1st quarter
Est. cash receipts:				
Cash sales	$ 33,480.00	$ 33,480.00	$ 33,480.00	$ 100,440.00
A/c of distributors	252,000.00	252,000.00	252,000.00	756,000.00
Installment a/c	36,000.00	36,000.00	36,000.00	108,000.00
Total receipts (Exhibit XVI)	$321,480.00	$321,480.00	$321,480.00	$ 964,440.00
Cash disbursements:				
Payments on accounts payable (Exhibit VIII)	$ 61,936.00	$ 61,936.00	$ 61,936.00	$ 185,808.00
Manufacturing expense (Exhibit XI)	98,200.00	98,200.00	98,200.00	294,600.00
Building expense (Exhibit X)	1,750.00	1,750.00	1,750.00	5,250.00
Insurance and taxes (Exhibit IX)				
Selling expense (Exhibit XIII)	90,208.40	90,208.40	90,208.40	270,625.20
Gen. and administrative expense (Exhibit XIV)	34,644.40	34,644.40	34,644.40	103,933.20
Income tax payments (balance sheet)	....	....	36,000.00	36,000.00
Dividends (basic information)	....	....	10,000.00	10,000.00
Capital expenditures (Exhibit XV)	15,000.00	15,000.00	95,600.00	125,600.00
Total disbursements	$301,738.80	$301,738.80	$428,338.80	$1,031,816.40

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Est. cash receipts:					
Cash sales	$ 100,440.00	$ 119,040.00	$ 130,200.00	$ 122,760.00	$ 472,440.00
A/c of distributors	756,000.00	844,000.00	988,000.00	928,000.00	3,516,000.00
Installment a/c	108,000.00	115,200.00	125,600.00	134,000.00	482,800.00
Total receipts	$964,440.00	$1,078,240.00	$1,243,800.00	$1,184,760.00	$4,471,240.00
Cash disbursements:					
Payments on accounts payable	$ 185,808.00	$ 216,776.00	$ 216,776.00	$ 216,776.00	$ 836,136.00
Manufacturing expense	294,600.00	365,640.00	365,640.00	365,640.00	1,391,520.00
Building expense	5,250.00	13,550.00	22,350.00	14,550.00	55,700.00
Insurance and taxes	....	2,100.00	6,450.00	....	8,550.00
Selling expense	270,625.20	314,081.20	351,644.00	315,948.80	1,252,299.20
Gen. and administrative expense	103,933.20	108,571.20	114,546.00	108,682.80	435,733.20
Income tax payments	36,000.00	36,000.00	36,000.00	36,000.00	144,000.00
Dividends	10,000.00	10,000.00	10,000.00	10,000.00	40,000.00
Capital expenditures	125,600.00	....	....	....	125,600.00
Total disbursements	$1,031,816.40	$1,066,718.40	$1,123,406.00	$1,067,597.60	$4,289,538.40

Exhibit XVIII

Financial Budget

Item	July	August	September	Total 1st quarter
Cash balance, beginning of period	$249,418.00	$298,559.20	$418,300.40	$ 249,418.00
Receipts:				
Cash budget	321,480.00	321,480.00	321,480.00	964,440.00
Bank loan	30,000.00	....	....	30,000.00
Bank loan	....	100,000.00	....	100,000.00
Bank loan				
Totals	$600,898.00	$720,039.20	$739,780.40	$1,343,858.00
Disbursements:				
Cash budget	$301,738.80	$301,738.80	$428,338.80	$1,031,816.40
Discount on bank loan	600.00	....	....	600.00
Interest on bank loan				
Bank loan				
Bank loan				
Bank loan				
Totals	$302,338.80	$301,738.80	$428,338.80	$1,032,416.40
Cash balance, end of period	$298,559.20	$418,300.40	$311,441.60	$311,441.60
Estimated minimum requirement	$300,000.00	$415,000.00	$310,000.00	$310,000.00

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Cash balance, beginning of period	$ 249,418.00	$ 311,441.60	$ 290,963.20	$ 309,357.20	$ 249,418.00
Receipts:					
Cash budget	964,440.00	1,078,740.00	1,243,800.00	1,184,760.00	4,471,240.00
Bank loan	30,000.00	....	....	....	30,000.00
Bank loan	100,000.00	....	....	....	100,000.00
Bank loan	....	100,000 00	....	....	100,000.00
Totals	$1,343,858.00	$1,489,681.60	$1,534,763.20	$1,494,117.20	$4,950,658.00
Disbursements:					
Cash budget	$1,031,816.40	$1,066,718.40	$1,123,406.00	$1,067,597.60	$4,289,538.40
Bank loan	....	30,000.00	....	....	30,000.00
Discount on bank loan	600.00	....	....	....	600.00
Interest on bank loan	....	2,000.00	2,000.00	2,000.00	6,000.00
Bank loan	....	100,000.00	....	....	100,000.00
Bank loan	....	....	100,000.00	....	100,000.00
Bank loan	....	....	....	100,000.00	100,000.00
Totals	$1,032,416.40	$1,198,718.40	$1,225,406.00	$1,169,597.60	$4,626,138.40
Cash balance, end of period	$ 311,441.60	$ 290,963.20	$ 309,357.20	$ 324,519.60	$ 324,519.60
Estimated minimum requirement	$ 310,000.00	$ 320,000.00	$ 310,000.00	$ 310,000.00	$ 310,000.00

EXHIBIT XIX

ESTIMATED PROFIT AND LOSS STATEMENT

Item	July	August	September	Total 1st quarter
Total net sales (Exhibit IV)	$321,480.00	$321,480.00	$321,480.00	$964,440.00
Less cost of goods sold (Exhibit XII)	164,717.00	164,717.00	164,718.00	494,152.00
Gross profit	$156,763.00	$156,763.00	$156,762.00	$470,288.00
Selling expense (Exhibit XIII)	90,850.40	90,850.40	90,850.40	272,551.20
Gen. and administrative expense (Exhibit XIV)	35,286.40	35,286.40	35,286.40	105,859.20
Total other operating expense	$126,136.80	$126,136.80	$126,136.80	$378,410.40
Operating profit	$ 30,626.20	$ 30,626.20	$ 30,625.20	$ 91,877.60
Earned discount (Exhibit VIII)				
Less interest				
Net taxable profit				
Less reserve for Federal taxes				
Net profit available to common				
Dividend on common				
Transferred to surplus				

Item	Total 1st quarter	2d quarter	3d quarter	4th quarter	Total year
Total net sales	$964,440.00	$1,119,040.00	$1,318,200.00	$1,122,760.00	$4,524,440.00
Less cost of goods sold	494,152.00	566,112.00	671,926.00	565,612.00	2,297,802.00
Gross profit	$470,288.00	$ 552,928.00	$ 646,274.00	$ 557,148.00	$2,226,638.00
Selling expense	272,551.20	316,008.20	353,571.00	317,874.80	1,260,005.20
Gen. and administrative expense	105,859.20	110,498.20	116,473.00	110,608.80	443,439.20
Total other operating expense	$378,410.40	$ 426,506.40	$ 470,044.00	$ 428,483.60	$1,703,444.40
Operating profit	$ 91,877.60	$ 126,421.60	$ 176,230.00	$ 128,664.40	$ 523,198.60
Earned discount	....	....	....	....	17,064.00
Less interest	....	....	....	....	6,600.00
Net taxable profit	....	....	....	....	$ 533,657.60
Less reserve for Federal taxes	....	....	....	....	240,146.00
Net profit available to common	....	....	....	....	$ 293,511.60
Dividend on common	....	....	....	....	40,000.00
Transferred to surplus	....	....	....	....	$ 253,511.60

There is no reason why the cash budget and financial budget cannot be combined into a single form, although it is often convenient to separate them. This convenience arises from the fact already suggested that estimated receipts and expenditures from physical operations included in the cash budget must first be summarized before the necessary information for the financial budget can be determined.

Estimated Profit and Loss Statement and Balance Sheet

The purpose of setting up the estimated statements of profit and loss and balance sheet is to determine (1) the profitability of the proposed operations and (2) the prospective financial position of the company at the end of the budget period if the proposed operations are carried out. Once constructed, they may then be tested and judged according to the techniques developed in Chapters 6 and 7. This procedure enables management not only to have a plan of future operations but also to judge these factors in the light of prevailing conditions. The estimated statements for the A.B.C. Corporation are given in Exhibits XIX and XX.

Exhibit XX

Estimated Balance Sheet

Year Ending June 30, 1951

Cash (Exhibit XVIII)		$ 324,519.60	Accounts payable (Exhibit VIII)	$ 31,600.00
A/c rec.—distributors (Exhibit XVI)		280,000.00	Reserve for taxes	240,146.00
Installment notes (Exhibit XVI)		126,000.00	Capital stock	200,000.00
Raw materials (Exhibit VII)		97,960.00	Earned surplus	919,980.60
Finished goods (Exhibit XII)		74,646.00		
Prepaid insurance (several schedules)		16,425.00		
Fixed assets:				
Land		45,800.00		
Buildings	$410,000			
Less depr. reserves	193,125	256,875.00		
Machinery	$441,600			
Less depr. reserves	242,100	169,500.00		
Good will		1.00		
Total		$1,391,726.60	Total	$1,391,726.60

Summary

This chapter has presented a brief outline of the type of budgeting activity that is carried on by business concerns requiring some complexity of organizational structure. There has been a steady growth in the number of businesses using the budget as a tool to aid in the planning and administration of funds. However, many firms, particularly small enterprises, still have not come round to making a formal outline of their plans.

The failure to use the budgeting device can be ascribed to ignorance of its advantages, lack of personnel able to work it out and use it, or the feeling on the part of the owner or owners that they are so familiar with their requirements that they do not need to bother "to put a lot of figures down on paper." As was pointed out, though, in the introductory chapter to this section on financial planning (Part III), there is no such thing as not budgeting. The question is one of engaging in sound or unsound budgeting. Every business decision is necessarily based upon some presumption as to the future, together with some plan for carrying it out. All that can be said is that an informal, intuitive type of operation represents the worst type of budgeting.

The high rate of business mortality is testimony to the fact that there has been inadequate careful planning on the part of managers and entrepreneurs. While all business failures cannot be attributed to faulty planning, there is little doubt that this is one of the primary causes; and to the extent that the budget is an aid in planning by forcing objectivity, the proper use of the budget in these cases may have averted many failures or, what is just as worth while, prevented the concern from ever opening its doors.

A budget can and should be fitted to the special requirements of the particular business. Generally, the smaller the concern, the simpler the budget required. The further the executives are removed from the actual operations of the business, the greater the detail required in the budget. The greater the proportion of the business done on a cash basis, the simpler the budgeting techniques necessary, while if there is a lag between sales and receipts and expenses and disbursements, more careful controls must be utilized. Generally too, the larger the required investment in assets for a given volume of sales, the more detailed the budget required.

The procedure illustrated in this chapter does not serve as a standard that can be applied to any and every situation. It has served to point up, however, the way in which supporting information may be developed,

subsidiary schedules can contain information that may be used for departmental control, and final needs and prospects may be compiled, when operations are so extensive as to require several sectors of authority and responsibility. The ideas and approach are generally applicable, if not the individual schedules and periods of time covered.

Regardless of the particular form followed, *it is necessary that the financial plan be kept flexible.* The budget is after all merely a forecast. It is the management's best estimate of sales and expenses, cash receipts and disbursements, profit, and financial condition for the budget period. It would be a coincidence if the actual profit for the year or cash balance at the year end came out exactly as forecast. The management can err in its forecast, since any one of several of the underlying conditions upon which it based its forecast can change. Thus, general business conditions can change from those predicted when the sales estimate was made, delays may occur in delivery of materials or parts, a strike may occur, or prices of materials and supplies may rise or fall more than predicted. But though these conditions come to pass, the very process of detailed planning and subsequent follow-up and correction will give a management far better appreciation and control of its operations to the end of furthering profitability and maintaining solvency than could possibly be accomplished otherwise.

Finally, before concluding this general section on financial planning, the reader should reappraise all the forms, techniques, and uses of the budget in terms of what was said in the earlier chapters about the importance of the correct budget period. To lose sight of its particular significance or to base the budget period on some arbitrary solar time interval is to become overmechanical in the application of the budget process and to sacrifice its potential effectiveness. Many a business practice seems to be introduced into a particular company because of a general awareness of its being "the thing to do" and without a full enough appreciation of what it is for or what its limitations are. When this is the case, the company would in all likelihood be just as well off without it.

This is the very situation that arises when a budget process is introduced without adequate attention being first given to the appropriate budget period. There is nothing of intrinsic worth about a year, month, or week. The important thing is determining the natural economic cycles of the particular business—cyclical, seasonal, cash. To choose some arbitrary solar time interval is to ignore the real changes which the business must anticipate if it is to control adequately its investment in assets and its operating results. Though a month was used as the shortest interval of time in the case covered in this chapter, for another business with a more rapid turnover of working assets and a smaller cash balance, a two-week

or even one-week period might be required. It can be said dogmatically that the ultimate success of any budget operation is dependent upon the appropriateness of the budget period chosen. And this period is an economic phenomenon, not an astronomical one.

Questions

1. What is the starting point in the development of any budget, whether it be simple or complex?
2. What is involved in the estimation of a sales schedule? What procedures may be used?
3. What else must be estimated before the various parts of the over-all budget can be developed?
4. Without referring to the text, see how well you are able to depict the flow of budgetary information from the earliest stages of estimation to the final master budgets.
5. In what ways may the various budget standards be established?
6. Why are supporting schedules used in preparing master budgets?
7. Why is it crucial that these subsidiary schedules conform exactly in the matter of information provided to the areas of administrative authority established in the organization?
8. What is the difference between a cash budget and a financial budget? What is the value to having these two separate statements instead of just the one?
9. What are the basic differences between the cash budget developed in this chapter and that developed in Chapter 9?

Chapter 12. PROMOTION AND EXPANSION

It might seem logical in a book dealing with the financing of business enterprises that the subject of promotion be taken up among the early chapters. Promotion is the first step in the life cycle of any business, and to the extent that it involves problems of finance, many of these problems are encountered by the owner or managers before operations get under way. However, the study of promotion requires substantial prior understanding of various practices and techniques of finance. Moreover, the two principal financial problems arising in the organization of any new business venture, *financial planning* and the *raising of funds,* are problems that financial management encounters throughout the life of the business. Because of these facts, promotion is introduced here as a special case under the over-all topic of financial planning.

The expansion of a going business raises similar financial problems. Planning must take place. Will expansion be profitable? How fast should it take place? Can funds be raised? Where can they be obtained? What source of funds is most desirable from the owner's viewpoint? These and related questions are present in deciding on a course of business growth. In the case of expansion, one deals with a going business, while with promotion the business is yet to begin operation. The following sections of this chapter will show that financial problems of expansion are usually easier of solution than those of promotion. Both, however, are special cases in the over-all financial functions of planning and financing.

The immediately preceding chapters have emphasized the importance to business of planning for cash requirements and for maximum profitability and the use of budgets as a tool in such planning. These principles are equally or more important in launching a new enterprise. All previous discussion has been in terms of a going business. It will be apparent from what follows that the organization of a new business raises additional financial problems.

Promotion

Promotion, in its narrowest sense, is the bringing into existence of a completely new business where none existed before. The term, however, is used in a number of other ways. In broader application it can be used in connection with a business already in operation. The purchase of a going business is like a promotion for the purchaser. He faces many of the

financial problems met by a new business. What form of legal organization will be employed, what types of securities will be used, etc.?

A firm expanding into a completely new line of business might regard the new venture as a promotion, particularly if the new field was unrelated to the previous business experience of the management. A notable series of examples during the Second World War and the years immediately following were the activities of Henry Kaiser and his associates. From construction and shipbuilding they branched out into steel, aluminum, cement, gypsum, automobiles, metal products, and housing. Some of these new lines were handled as divisions of the largely family-owned Henry J. Kaiser Company and others as separate corporations, controlled through major stock ownership by the Henry J. Kaiser Company.[1]

Expansion

The financial aspects of expansion differ from those of promotion largely only in the matter of degree. Expansion refers to the growth of an existing business, although that growth may take place through a separate subsidiary. In our present business economy expansion is considered as normal. A business that does not expand is looked upon with disfavor, as though there were something wrong with it. Most businessmen ordinarily contemplate some expansion if only to keep up with the growing population and the growth of personal incomes. The slow increase in business assets that such expansion entails does not ordinarily raise financial problems. However, if slow growth in physical facilities or units of inventory is coupled with a rapid increase in the price level, as has been the case since 1946, acute financial problems may ensue.

[1] The phenomenal promotional activity of Kaiser and his associates is revealed by the following list of new companies and divisions developed since the middle 1940's, from "The Arrival of Henry Kaiser," *Fortune,* July, 1951, pp. 68*ff*.

"Kaiser Steel Corporation, the only integrated steel plant on the West Coast, with sales of $101 million.

"Kaiser Aluminum and Chemical Corp., one of the Big Three aluminum companies, with sales of $150 million.

"Kaiser Metal Products, Inc., a stamping and enameling company jointly owned with Sears, Roebuck, with sales of $25 million.

"Kaiser Gypsum, a building products division, with sales of $8.5 million.

"Permanente Cement Co., with sales of $20 million.

"Kaiser Community Homes of Los Angeles which has built and sold about 30,000 houses in the past two years.

"Kaiser Engineers, a consulting firm that performs architectural, engineering, and construction services for the public and Kaiser companies, with a backlog of $150 million.

"Kaiser-Frazer Automobile Co., which in 1950 sold 151,000 cars and grossed $238 million."

Of primary concern in this chapter is the case of rapid expansion. The increase in assets made necessary by a sharp growth in sales often cannot be taken care of solely by the retention of earnings; recourse must be had to outside sources of long-term or permanent capital. When this is the case, more care in financial planning must be had. Many firms have failed because business was too good—management failed to provide sufficient cash to supply the larger asset needs.[2]

Here, too, the problems of raising funds come closer to those met by the promoters of a new business. They are similar in nature, but ordinarily easier of solution because in the case of expansion there is a going business enterprise. Prospective creditors and owners have some basis of appraising the management because there is a past record of operations.

Motives for Promotion

Who Engages in It?

A promoter is not a separate species of individual who is trained for his task through education or experience. Anyone going into business for himself, whether it be a schoolboy starting a newspaper route, a returning soldier who, having saved up some money, opens a small store, or a person like Preston Tucker who, with little capital of his own, can entice thousands of outsiders to join him in starting a major enterprise like the ill-fated Tucker Corporation, is a promoter. There are a very few individuals who might be labeled professional promoters, whose primary interest is to start a new business or reorganize a going one, and once it is operating smoothly, sell out and start another venture.

Arthur E. Morgan has aptly described the situation of most individuals starting new businesses: [3]

> Most people . . . are just average, reasonably competent men or women, ready to work patiently and steadily. If such a person wants to operate his own business he must find some work for which he is not disqualified, which has reasonably good prospects of success, and is not already overdone; and then he must slowly and persistently develop competence, experience, resources and reputation. Gradually he will master difficulties, learn the field, acquire a good name, and become established. His skill, experience and reputation will become capital which is not easily taken from him. It is by such unexciting means that most small businesses develop.

[2] The problem of financing all growing businesses, but particularly corporations, was further accentuated in 1950 and 1951 by increases in both personal and corporate Federal income taxes which left a smaller percentage of earnings available for reinvestment in the business.

[3] Arthur E. Morgan, *A Business of My Own* (Yellow Springs, Ohio, Community Service, Inc., 1946), p. 26.

Whoever the promoter may be, and whatever the size of the enterprise, the person assuming the promotion function must assume the responsibilities that go along with the formulation of a new business. A promoter is not usually an expert in finance, most often quite the contrary. For this reason it is essential that anyone starting a new business be aware of the financial problems that are likely to be encountered.

The motives for promotion may be many. Although few studies have been made of the reasons for starting a new business, it is usually assumed that the profit incentive is controlling in most cases. In this country the choice is open to any individual of starting his own business or trying to find employment with an established enterprise. When chances of financial gain appear to be great and, along with other factors, outweigh the perhaps greater security of receiving a regular wage or salary, starting a new venture is the obvious choice.

The decision to start a new business does not depend alone on a cold appraisal of relative profit opportunities. Personal temperament has much to do with whether one becomes a promoter or not. The cautious individual is less likely to take a chance on risking his capital and position in a venture that might easily fail. The less cautious individual in the same position looks on the same venture with more optimistic eyes. He sees all the chances for success and tends to minimize the chances of failure.

Certainly an important motive influencing the organization of new enterprise is the desire to be one's own boss. Many people will sacrifice what appears to be the chance of obtaining a higher income from working for another for the freedom of action obtained in managing one's own affairs. Other businesses are started because they are a means of employing the whole family. The small neighborhood grocery store which must remain open for long hours each day can be manned periodically by the husband, wife, and children and, during busy hours, by several members of the family. At the same time the family obtains its food, the largest item in the budget, at a reduced cost. Reasons of health account for the inception of many concerns. A man who cannot stand the strain of a steady job, eight hours a day, week after week, can move to a better climate and, if he can meet the financial and other responsibilities, open a tourist court or other venture that will not overtax his physical energies.

Importance of Promotion

Our economy since its very inception has been characterized by the free entry of new businesses. This ability to start one's own business at will has undoubtedly been one of the principal reasons contributing to the continued progress in the standard of living. The ease of entering business

has contributed to the stream of new and improved products and services. Without the continued competition of new concerns established businesses would not have as great an incentive to improve their products. In the same manner, the constant pressure of new competition contributes to keeping prices at a lower level.

In this country, unlike most others, it is possible for a person to amass a fortune in a lifetime through his own efforts in a business endeavor. It is equally true that collections of wealth can be quickly dissipated when invested in a new business concern because of the unbridled rivalry of competing enterprises.

Table 1 shows the relationship of new businesses and business transfers, discontinuances, and failures to the average number of businesses in op-

TABLE 1

TOTAL BUSINESSES IN OPERATION, NEW BUSINESSES, AND BUSINESS TRANSFERS, DISCONTINUANCES, AND FAILURES, 1944 TO 1951

Year	Average no. of business firms in operation (000 omitted)	Per cent of total businesses			
		New businesses [a]	Business transfers [b]	Discontinued businesses [c]	Business failures [d]
1944	3,062	11.6	10.1	6.5	0.04
1945	3,258	13.2	13.7	6.2	0.02
1946	3,605	17.2	17.1	6.3	0.03
1947	3,879	12.3	14.4	7.6	0.09
1948	3,995	10.1	12.4	9.3	0.13
1949	3,961	9.1	11.6	9.8	0.23
1950	3,985	10.0	11.7	9.2	0.23
1951	4,013	10.1	10.4	9.4	0.20

[a] Includes only firms newly established—does not include transfers.

[b] A firm which is maintained as a business entity but which undergoes a change in ownership is not a case of discontinuance but is counted among the business transfers. Transfers also include firms which have undergone a change in legal form of organization.

[c] Closures of all kinds without reference to the reason for going out of business—e.g., failure, retirement or illness of the proprietor, etc.

[d] Business failures are largely among commercial and industrial enterprises which have discontinued operations following assignments, voluntary or involuntary bankruptcies, and such actions as executions, foreclosures, or attachments where losses to creditors have resulted or where the concern withdrew voluntarily from active operations leaving unpaid obligations; also among enterprises involved in court actions such as receiverships, reorganizations, or arrangements which may or may not lead to discontinuance of operations; and among enterprises reaching a voluntary compromise with creditors out of court.

SOURCE: *Survey of Current Business.*

eration each year from 1944 to 1950. The proportion of new business to the total increased at the end of the Second World War but has since leveled off at approximately 10 per cent. Despite the difficulties promoters encounter in getting a new firm under way, it appears that there has been no lack of new businesses in recent years. However, an even greater number of firms discontinued operations or transferred ownership during the 1948 to 1950 period.

There are no comprehensive data to show why firms go out of business. The discontinuances are closures of all kinds whether from failure, illness of proprietor, retirement, or other causes. The outright failures (column 5 in Table 1), which largely represent closures where creditors lost money, are comparatively small. It is probable, however, that a significant proportion of the discontinued businesses were closed because of failure in the economic sense, that is, the failure to earn a satisfactory rate of return for the owners or actual loss operation which was stopped by closure before it became so serious as to impair the creditors' investment. The discontinuance of a business could result in severe loss to the owners without getting into the failure column. It is also probable that many of the closures ascribed to illness or desire for retirement could be more truly classified as economic failures.

Some of the business transfers, too, undoubtedly occurred because the owners could not make a go of it. Ordinarily more can be realized by a sale of a going business than by liquidating it. Thus sale would be tried in many cases before outright closure even though the owners realized less than their net equity in the business.

This discussion of discontinued, transferred, and failed businesses is important to promotion because the largest share of firms falling within those categories are new. The Department of Commerce prefaces its *Establishing and Operating* series of bulletins with a word of caution on the chances of success in one's own business, stating: [4]

> You stand a 50-50 chance to fail during the first 2 years. Half of the small businesses opening their doors are forced to close them again within 2 years, and fully one-third drop out during the first year.
>
> Each year, even in prosperous times, nearly half a million businesses throw in the sponge. Becoming your own boss is risky. The chances of losing your capital and savings are always high. It is a gamble in which beginners without previous experience stand little chance of success.

[4] Paul C. Trimble with the assistance of Donald Layman, Robert H. Johnson, and Charles H. Sevin, *Establishing and Operating a Dry Cleaning Business* (Washington, D.C., Department of Commerce), p. viii. This is one of 38 booklets published by the Department ranging from *Establishing and Operating an Air Conditioning and Refrigeration Business* to *Establishing and Operating a Woodworking Shop.*

The preponderance of relatively new businesses among all business failures in the years 1945 to 1950 is shown in Table 2. Approximately 30 per cent of all failing businesses had been in operation 2 years or less, 50 per cent 3 years or less, and 60 per cent 4 years or less.[5]

TABLE 2

FAILURES BY AGE OF BUSINESS, 1945 TO 1950

Age, years	Percentage of all failures						Average
	1945	1946	1947	1948	1949	1950	
1 or less	8.0	9.3	5.0	4.8	4.5	4.2	6.0
2	23.9	26.8	23.6	23.3	19.7	18.2	22.6
3	13.6	18.9	22.4	27.0	20.1	17.5	19.9
4	6.7	10.4	10.6	13.9	19.3	14.4	12.6
5	6.9	6.4	6.0	7.5	11.0	13.9	8.6
6	6.2	6.2	4.6	3.4	5.2	8.5	5.7
7	5.1	3.9	3.5	2.4	3.1	4.3	3.7
8	4.7	1.3	2.0	2.5	2.2	2.6	2.6
9	2.1	1.8	1.7	2.4	2.1	1.8	2.0
10	1.7	0.7	1.5	1.8	1.7	1.8	1.6
Over 10	21.1	14.3	9.1	11.0	10.9	12.8	13.2
No. of failures	809	1,129	3,474	5,250	9,246	9,162	

SOURCE: Griffith M. Jones, "Why Do Businesses Fail?" *Dun's Review*, September, 1951, p. 27.

Size of Promotions

Most new businesses are small. The major reason for this fact is the difficulty of obtaining capital other than that contributed by the promoter. The reasons for this difficulty are set forth at greater length in a later section of this chapter. Another reason for the small average size of new ventures is the nature of the business population itself. It has been pointed out that by far the greatest number of concerns are service and retail stores which, because of the nature of their operations, tend to have a limited sales volume. The capital needs of these types of business are usually small and thus meet better the pocketbooks of most would-be

[5] These data are failures which typically resulted in loss to creditors, as distinguished from the more general use of the term in the Department of Commerce quotation above.

entrepreneurs. Table 3 shows that 86.1 per cent of new businesses started during 1948 began operations with 0 to 3 employees, whereas the business population had only 74.5 per cent of all firms in that category. The large businesses mostly grew to their present size rather than being started on a large scale.

TABLE 3

PER CENT DISTRIBUTION OF ESTABLISHED AND NEW BUSINESSES BY NUMBER OF EMPLOYEES IN 1948

Size	Established businesses [a]	New businesses [b]
0–3 employees	74.5	86.1
4–7 employees	12.8	9.5
8–19 employees	7.8	3.2
20 or over employees	5.0	1.1

[a] Mar. 31, 1948.
[b] Started in 1948.
SOURCE: Murray F. Foss and Betty C. Churchill, "The Size Distribution of the Postwar Business Population," *Survey of Current Business,* May, 1950, pp. 13 and 15.

Estimates of the average asset size of all new retail and wholesale firms starting business in the years 1945 to 1947 were $9,500 and $22,000, respectively.[6] Among the retailers the averages ranged from $5,600 for filling stations to over $25,000 for building material and hardware stores. The estimated average asset size for new manufacturing firms started during 1946 to 1948 was $12,000.[7] The range by type of business was from a low of slightly over $6,000 for new lumber firms to $22,000 and $43,000, respectively, for the food processing and textile industries.

STEPS AND FUNCTIONS INVOLVED IN PROMOTION

For purposes of discussion the promotion of a business can be conveniently divided into three steps: conception of the idea, investigation of the project, and organization of the production factors. In practice, however, there is overlapping between these steps.

6 Lawrence Bridge, "Capital Requirements of New Trade Firms," *Survey of Current Business,* December, 1948, pp. 8–9.

7 Lawrence Bridge and Lois E. Holmes, "Capital Requirements of New Manufacturing Firms," *Survey of Current Business,* April, 1950, p. 11.

The conception of an idea for a new business may take the form of an invention, or it may be no more than the realization that there is a good opportunity of success for a new gasoline station in a particular neighborhood. Conception of the idea is the first step, and on the practicability of the idea rests much of the chance of success or failure of the venture.

While anybody with imagination or initiative can conceive of an idea for a new business, few ideas are carried through the second stage, investigation. This step involves the investigation of the feasibility of the idea: What are the chances of success? The financial aspects of the investigation are the subject of the following section. It is at this stage that the subject of promotion is so pointedly tied to the broad function of financial planning.

While comparatively few ideas for new enterprises are carried through the investigation stage, even fewer survive the final steps of organization of the production factors. Once a promoter feels that the investigation of a venture assures enough prospect of success to proceed, his next step is to bring together all the factors that make up a going business—cash, employees, materials, location, customers, etc. The financial aspect of this third step, the raising of the necessary funds, involves problems not ordinarily found in the financing of going concerns. These peculiar problems are analyzed following the discussion of financial planning.

Financial planning for a new enterprise makes use of the same budgeting tools that were described in the preceding chapters of Part III. The first task before the promoter in making his financial plans is to estimate the profit prospects of his new venture in the form of an estimated profit and loss statement. The second job is to estimate his total financial requirements. These can be expressed in an estimated balance sheet. The timing of the cash receipts and disbursements in arriving at the total outlay for assets and the source of the cash is estimated in a cash budget. The following discussion points out the problems peculiar to a new venture in making these financial estimates.

Financial Investigation—A Problem in Budgeting

Profit Prospects

Of primary importance in the investigation of the feasibility of any promotion is the question of whether or not the business will yield a profit and the amount of the profit.

However, the task of estimating the revenues and costs to arrive at a profit figure is immensely more difficult than for a going concern with a past history of sales and costs. Most difficult for the promoter is the job of estimating sales. Sales are the product of price and volume. The unit price

for the product or service of the new enterprise may, in many cases, be estimated with a fair degree of certainty. The price of the product or service of most new businesses is limited on the upper side by that of competitors already in the field. If the going price for gasoline is $0.26 a gallon in a given vicinity, the promoter of a new gas station will know that he cannot get any reasonable volume of sales at a higher price. And if he sets a lower price, the chances are competition will come down to meet him or it may be that his profit would be so low as to make the whole proposition unattractive. The same situation is true in a vast array of other retail trade and service businesses. The going price in the community can be readily ascertained. In the case of manufacturing, there is more likelihood of the product differing from that of competitors, but even here it is possible to estimate a price with some accuracy by making allowance for known differences between the new product and those with which it will compete.

It is in making the estimate of volume of units to be sold that the promoter is on most unsure ground. Unlike the going business, there are no past year's sales to be adjusted up or down to allow for a change in expected business conditions, a change in promotional effort, or an improvement in the product. The promoter has little to help in this regard.

The estimating of sales is a problem in marketing and thus outside of the scope of a volume on finance such as this. However, a brief outline of some of the questions that must be answered will illustrate the problems faced. The first question the promoter must decide is the type and extent of the market he plans to reach. If a retail business, will it cater to a small neighborhood, an entire city, a marketing area embracing rural sections, or the entire country as would be possible with mail order sales? If a manufacturing business, what means of distribution will it employ, that is, will sales be made through wholesalers, retailers, or direct to the consumer, or some combination of these? Will sales be made through a single outlet in a marketing area or through multiple outlets?

If possible the promoter will want to determine the past sales in his selected line of business in the market area, the number of potential customers, the population and income trends, and the number of competitors and their sales and methods of doing business. In certain types of retail business it may be helpful to make a traffic count of the number of people passing various possible locations. These and other data bearing on sales will all be instrumental in obtaining the best estimate possible of the sales of the new venture.

Because the sales estimate must necessarily be rough, it will be helpful to make an estimate of the range within which actual sales may be expected to fall. This information will be particularly useful when it comes

to the problem of raising funds. Funds are difficult to secure for a new business. The promoter may be able to handle adequately a limited volume of sales with the means at his disposal. But if larger than anticipated sales are realized, this seeming benefit may actually be a disadvantage because of the inability of the business to handle the large volume with the limited funds available.

Estimating Costs. The approximation of costs for the estimated profit and loss statement can usually be accomplished with a much greater degree of reliability than the estimate of sales volume. For the new business all costs—even so-called "fixed" costs—are related to the asset size or to sales volume. Therefore once the sales estimate has been made, the individual costs that are typical for the type of business selected can be related directly to sales. Data are available for many lines of business showing detailed breakdowns of the various expenses as a percentage of sales.[8] Books have been published on business operation in many fields which include average expense ratios. Many trade associations compile the average of experience of their members, which, when published, can be used by individual units to check their experience against the industry. An example is that of the National Retail Furniture Association, shown in Table 4. The Small Business Division of the Department of Commerce has published a series of manuals previously referred to, on establishing and operating many types of business. These manuals contain such operating statistics.[9]

Detailed expense ratios of average business performance are invaluable as guides in making estimates. They cannot, however, be accepted at face value and when converted into dollar terms be adopted as the estimated expenses of the new venture. The new enterprise will differ from the average of the industry. Some expenses will probably run higher and others may run lower than indicated by the published figures. As careful an appraisal as possible should be made of the actual costs that will be incurred, item by item. Then the proportions may be checked against the average for that line of business to see whether or not they are too far out of line.

In a retail, wholesale, or manufacturing business where cost of goods sold is the largest item of cost, actual quotations on merchandise or material to be purchased can be obtained from suppliers. These will, of

[8] A particularly valuable reference listing a wide variety of sources of information on small business by type of business is James C. Yokum, assisted by Marjorie Landaker, *Information Sources for Small Business*, 3d rev. ed. (Columbus, Bureau of Business Research, Ohio State University, 1949).

[9] The National Cash Register Company publishes annually average expense ratios for several types of retail business. Bureaus of business research of universities and other government agencies compile similar information.

TABLE 4

TYPICAL RETAIL FURNITURE STORES

Statement of Operations for the Year 1951

Medium-size Stores ($125,000 to $350,000)

(In per cent)

Item	Average	Range of common experience	Your figures
Gross sales	103.94	102.73–107.73	......
Less returns and allowances	3.94	2.73– 7.73	......
Net sales	100.0	....	100.00
Cost of merchandise sold	63.08	59.48– 65.45	......
Gross margin on sales	36.92	34.55– 40.52	......
Operating expenses:			
Administrative (including buying)	10.30	7.33– 13.04	......
Occupancy (store and warehouse)	5.24	4.18– 7.05	......
Advertising and publicity	3.94	2.26– 5.53	......
Selling	6.26	4.89– 7.83	......
Handling	3.15	2.15– 4.61	......
Delivery	3.14	2.22– 3.87	......
Total operating expenses	32.03	27.50– 38.22	......
Net operating profit	4.89	1.65– 8.50	......
Other income:			
Cash discounts earned	1.10	0.86– 1.43	......
Income from credit service charge	2.42	1.44– 4.50	......
Interest earned (on notes and investments)	0.17	0.03– 0.39	......
Recoveries on bad accounts	0.10	0.02– 0.32	......
Miscellaneous	0.33	0.04– 0.74	......
Total other income	4.12	1.70– 6.05	......
Total income	9.01	5.09– 11.18	......
Other charges:			
Discounts allowed	0.40	0.10– 0.86	......
Interest paid (other than on mortgage indebtedness)	0.49	0.28– 1.01	......
Provision for bad accounts	0.52	0.30– 0.91	......
Loss on repossessions	0.53	0.11– 1.16	......
Loss on trade-ins	0.26	0.22– 0.48	......
Miscellaneous	0.46	0.09– 1.43	......
Total other charges	2.66	0.65– 2.80	......
Net profit for the period (before income tax deductions)	6.35	3.92– 9.87	......
Net profit for the period (after income tax deductions)	3.26	1.81– 5.49	......

SOURCE: National Retail Furniture Association, *19th Annual Report—Furniture Store 1951 Operating Experiences* (Chicago, 1952), p. 6. Similar ratios are published for small stores (under $125,000 sales) and for various sales size categories of large stores.

course, vary with quantity purchased at one time, but with the expected sales volume known and a knowledge of the typical inventory turnover for the type of business the amounts to be purchased can be rather accurately gauged.

Salaries and wages for various occupations are easily obtainable. Most promoters will already have had some experience in their chosen field before embarking on a business of their own. Wages for many occupations are a matter of public record. The Bureau of Labor Statistics compiles statistics on hourly earnings and weekly wages by occupation and geographical area. For those occupations which are unionized, the wage scales are of course available from local union headquarters. The want-ad sections of the daily papers display the asking and bidding price for countless jobs; personnel agencies are only too willing to give this information; and even competitors are not as reluctant to reveal what they are paying for their help as they are to give out sales or profit figures.

The number of persons to be hired is not usually difficult to estimate. Many new businesses because of their limited size have no problem at all in this respect. The promoter or his immediate family provide all the help necessary. Even for those enterprises which start on a larger scale, the number of employees needed is ordinarily small (see Table 3). The number may be directly related to the number of hours the establishment is to remain open. A gas station, for example, that is to remain open 24 hours a day would need at a minimum three men, and the possible need for one or two extra to wait on customers during the busiest part of the day would be dependent on the estimate of traffic. In a manufacturing firm, the output per machine and number of machines tended per worker would determine the employees needed.

For new ventures with their shortage of capital it is much commoner to rent the physical quarters than to buy them. The monthly rent, whether a fixed sum or varying with sales, is a predeterminable cost. The estimated sales will determine the approximate size of the quarters needed to conduct the business. Once this is settled, actual quotations may be obtained on alternate locations.

Depreciation expense and amortization of leasehold improvements can be gauged with a fair degree of accuracy. The scale of operations will determine the fixed equipment other than land and buildings, such as machines, trucks, counters, display cases, office machines, etc., which will be needed. If it is to be purchased rather than rented, the amount of asset investment can be ascertained and, on the basis of customary depreciation rates used in the industry or allowed by the Bureau of Internal Revenue, annual costs can be computed.

Other usually less significant expenses such as heat, light, power, telephone, cash discounts allowed, warehousing etc., can be approximated once the estimated sales figure is obtained. The price of these services and other costs, like that of labor and materials, are usually readily secured. The uncertain factor is the time factor or quantity of each to be utilized. Not as much care needs to be used in making the estimates of these minor expenses. Errors in estimating here will have less significance than in the case of major items like merchandise and wages because of the smaller dollar sums involved. Often the inexpert omit minor items.

The difficulty of arriving at a reasonably accurate sales estimate was pointed out above. Because of this uncertainty it may be wise to estimate costs on the basis of several different sales estimates. The new entrepreneur would then have several estimates of profit based on different levels of sales. Arriving at the anticipated costs at the different sales volume can be facilitated by dividing all estimated expenses into two categories, fixed and variable.[10] Common expenses that would fall in the fixed class are rent, depreciation, office salaries, licenses, and many taxes other than income taxes. These would remain unchanged with variations in sales within certain limits.

The variable expenses would vary directly with sales and could be easily computed for any level of estimated sales by multiplying the calculated expense ratios times the dollars of sales. These ratios could again be checked by comparison with industry-wide data particularly if the latter were broken down into classes by sales volume. The results could be set up in diagrammatic form in a break-even chart similar to that illustrated in Chapter 10. Much greater caution must be used in interpreting profit estimates by this method than in the case of the going firm using its own experience with cost. The realized expenses of the new venture will differ from the average in many respects, and more often on the high than low side.

Many estimates of cost will depend on decisions affecting the amount of investment to be made in the various assets. With the great difficulty encountered in most cases of obtaining outside capital the promoter usually finds that he must make the choice in favor of that plan which minimizes asset investment even though it may mean some sacrifice of profit. Some of the more important means of reducing the initial investment are discussed in the following section. The decision to lease rather

[10] This twofold division overlooks the semivariable costs that are present in most businesses. This omission would not result in serious error in the majority of cases. Such costs are less important than the fixed and variable. And the promoter would have considerable difficulty in judging the rate of variation with changing sales volume.

than purchase a building means that rent expense must be estimated rather than the expenses that are incident to ownership of plant, such as depreciation, repairs, real-estate taxes, insurance, etc.

Estimating Profit. After all expenses have been estimated, they are assembled with the estimate of sales (in the form of an estimated profit and loss statement) to show what the anticipated profit for the new venture will be. This is as far as the financial investigation goes in many cases. The detailed research into the sales prospects and operating expenses often reveals that what appeared to be a rosy profit picture when considered in the abstract will not in fact pay out. The venture would be dropped if the estimated profit and loss statement shows that the business after it gets into operation can only be conducted at a loss. Ordinarily to warrant proceeding further the profit estimate would have to be such that the promoter would feel that he had a good thing—that the profits plus any estimate of salary to be paid to himself would be more than he could make if he employed his labor and capital in other pursuits.

Initial Financial Requirements

II Assuming that the promoter is satisfied with the profit prospects as estimated above, the second major step in the financial investigation is to determine how much capital (total assets) will be required. To determine the total investment the promoter must, in effect, estimate what the balance sheet of his enterprise will look like when it is in full operation. The total of the various assets required by the going business will be the sum that must be obtained.

The casting up of an estimated balance sheet, like the putting together of an estimated profit and loss statement, is much more difficult for a new enterprise than for the going concern. The going concern already has all or most of its assets already on hand. The sums in the various asset accounts are merely changed up or down to reflect the effect of the expected operations for the forthcoming period. Two methods, the industry ratio method or the cash budget method, or both, can be used to arrive at an estimate of asset needs.

Cash Budget Method. The cash budget method of estimating cash requirements is the most precise method of arriving at the financial requirements of a new business. It involves the setting up of a cash receipts and disbursements budget similar to that illustrated in Chapter 11. It has an advantage over the ratio method in that it shows the estimated cash need directly, and it takes into account the deficiency of cash receipts as compared with cash disbursements during the early life of the business. This method of estimation may be illustrated by using as an example a barbershop.

Assume that an experienced barber plans to open a one-man barbershop in a city to which he has recently moved. He has found what he believes to be a suitable location which he can rent. He has ascertained that fixtures and equipment will cost $3,000, a beginning inventory of necessary supplies $100, and a city license $50. Rent will be $115 per month and union dues $2 per month. He has estimated that other expenses on a monthly basis will be as follows:

Heat and light	$ 15
Laundry and sundries	5 per cent of sales
Miscellaneous expenses	2 per cent of sales
Own living expenses	$250

Since his shop will be new, he estimates that it will take him about six months to build up a clientele. His estimate of monthly sales is as follows:

1st month	$200
2d month	250
3d month	300
4th month	350
5th month	400
6th month	500

On the basis of these estimates the schedule of cash requirements is worked out as shown in Exhibit I.

Cash disbursements exceed cash receipts each month for the first five months. It is not until the sixth month that estimated receipts exceed disbursements. On the basis of the facts given, the barber should have cash of $3,665 before starting the enterprise or should have access to suitable credit to provide for any deficiency.

Total cash requirements may be held down by the promoter in a number of ways. The barber, in the illustration above, by renting rather than purchasing a building outright reduces his initial cash requirements by thousands of dollars. On the other hand, he substitutes a monthly cash charge, rent, for somewhat smaller cash expenses in the form of real-estate taxes, repairs, and perhaps heat that would be incurred if he owned the building. Not only does the promoter avoid tying up a good share of his available capital in a fixed asset, but if the first location chosen proves to be unsatisfactory for any reason, it is easier to shift to another. A trading concern could minimize cash outlay by selling for cash rather than on credit. A manufacturing firm could reduce substantially its initial asset needs by subcontracting as many of its operations as possible. Many other factors affecting the investment in assets have been considered in some detail in Chapter 10. These should be reviewed again at this point.

If fixed assets cannot be rented, the initial cash requirements can be

Exhibit I

Schedule of Cash Requirements, Barbershop

Item	1st month	2d month	3d month	4th month	5th month	6th month
Nonvariable expenditures:						
Rent	$ 115.00	$ 115.00	$ 115.00	$ 115.00	$ 115.00	$115.00
Heat and light	15.00	15.00	15.00	15.00	15.00	15.00
Union dues	2.00	2.00	2.00	2.00	2.00	2.00
Owner's withdrawals	250.00	250.00	250.00	250.00	250.00	250.00
Total nonvariable expenditures	$ 382.00	$ 382.00	$ 382.00	$ 382.00	$ 382.00	$382.00
Variable expenditures:						
Laundry and sundries (5 per cent of sales)	$ 10.00	$ 12.50	$ 15.00	$ 17.50	$ 20.00	$ 25.00
Misc. expenditures (2 per cent of sales)	4.00	5.00	6.00	7.00	8.00	10.00
Total variable expenditures	$ 14.00	$ 17.50	$ 21.00	$ 24.50	$ 28.00	$ 35.00
Original investment:						
Equipment	$3,000.00					
Inventory	100.00					
License fees	50.00					
Total original investment	$3,150.00					
Total cash requirements	$3,546.00	$ 399.50	$ 403.00	$ 406.50	$ 410.00	$417.00
Sales	200.00	250.00	300.00	350.00	400.00	500.00
Net cash requirements	$3,346.00	$ 149.50	$ 103.00	$ 56.50	$ 10.00	None
Cumulative cash requirements	3,346.00	3,495.50	3,598.50	3,655.00	3,665.00	

minimized by buying the assets on the installment plan. The effect of this procedure can be illustrated by reference to the barbershop case above. If it is assumed that the equipment could be purchased on time for $3,350 ($1,100 down and $75 per month beginning in the second month for 30 months), the schedule of cash requirements would appear as shown in Exhibit II. By purchasing the equipment on time rather than for cash the

EXHIBIT II

SCHEDULE OF CASH REQUIREMENTS, BARBERSHOP

Item	1st month	2d month	3d month	4th month	5th month	6th month
Total nonvariable expenditures (from Exhibit I)	$ 382.00	$ 382.00	$ 382.00	$ 382.00	$ 382.00	$382.00
Total variable expenditures (from Exhibit I)	14.00	17.50	21.00	24.50	28.00	35.00
Original investment:						
Equipment—down payment	1,100.00					
Equipment—monthly payment	......	75.00	75.00	75.00	75.00	75.00
Inventory	100.00					
License fees	50.00					
Total cash requirements	$1,646.00	$ 474.50	$ 478.00	$ 481.50	$ 485.00	$492.00
Sales	200.00	250.00	300.00	350.00	400.00	500.00
Net cash requirement	$1,446.00	$ 224.50	$ 178.00	$ 131.50	$ 85.00	None
Cumulative cash requirement	1,446.00	1,670.50	1,848.50	1,980.00	2,065.00	

initial cash need is reduced by $1,590. This method of purchase, it must be noticed, does not reduce the total cash need in the long run, but it does have the merit of holding down the investment at a time when it is most difficult for the owner to raise funds.[11] If the business is successful, the installments on the debt can be paid out of the profits and cash retained by charging depreciation.

The foregoing case of the barbershop promotion illustrates the substantial addition to total cash needs that may arise from the excess of cash disbursements over cash receipts during the initial stages of operation. The purchase of an established business can eliminate this drain. The price of the new business may be more or less than the net book value of the assets (after deducting all liabilities). If less, the purchaser saves the entire amount of the original operating cash loss. To the extent that it is

[11] The total cash need is actually increased by the amount that the time price exceeds the cash price and the financing charge, if the latter is not included in differential in the two prices.

larger than the net book value of the assets the difference might be looked upon as a sum which, in a sense, takes the place of the initial cash deficiency. It is probable, however, that this difference will bear little relation to the original cash losses sustained by the business.[12]

The purchaser of a going business has two distinct financial advantages over the promoter of a completely new business. The amount of cash needed can be determined quite accurately. Second, the person buying a business in most cases starts out with an income the first month of ownership. No matter how careful the estimates, the promoter of a new business cannot tell how long cash disbursements will exceed cash receipts or how large these deficiencies will be each month. A disadvantage of buying, on the other hand, is that one may get a business that is on the way down. It may be difficult to reverse the trend.

Industry Ratio Method. Total asset needs and the proportion of certain categories of assets to the total can be approximated from industry-wide average ratios. Here, in arriving at balance-sheet estimates just as in the case of expense estimates, it is dangerous to use industry averages to arrive at specific figures for the new concern. It is better to use the ratio method as a check on the cash budget method or, at best, only to fill in gaps in the estimates of particular asset needs where other methods of obtaining these figures cannot be used. Ratios of the assets to sales are available for many lines of business. For example, if the average ratio of sales to total assets is known for retail hardware stores in the $25,000 to $50,000 sales volume category, it is a simple calculation to estimate what the asset requirements are for an average hardware store whose sales volume is $40,000.[13] Finer breakdowns showing the ratio of inventory, accounts receivable, equipment, land and buildings, etc., to sales may be secured in many cases. Likewise approximations of total asset needs can be made from ratios published annually by Dun and Bradstreet for 72 lines of business.[14]

A main drawback of the use of most industry ratios is that the firms averaged are not homogeneous enough to give an accurate indication of the investment that will be needed for a particular new business. If one was interested in opening a retail shoe store, for example, the industry average for shoe stores includes stores selling only men's shoes, only

[12] The factors bearing upon the price paid for an established business are treated in more detail in Chapter 22.

[13] The National Retail Hardware Association publishes annually comprehensive profit and loss statement and balance-sheet ratios of the average performance of hardware stores in four sales-size categories.

[14] Roy A. Foulke, *Financial Guides to Healthy Business Management* (1951, Dun and Bradstreet, Inc., New York), pp. 56–57. These ratios have an advantage over most that are available in that each is shown for the first, median, and third quartile of the firms in each line of business.

women's shoes, and a combination of both; stores selling only for cash and those selling on credit; stores carrying high-priced lines and those specializing in the low-price field; stores that rent and those that own their own premises. It is clearly evident that an estimate of asset needs based on the industry figures cannot be very accurate for a promoter with limited capital who plans to open a store in rented premises, with second-hand fixtures, selling only low-priced men's shoes and only for cash.

Another difficulty encountered in estimating asset needs based on ratios computed from going concerns is that it does not allow for losses incurred during the first few months of business life. It is an exceptional enterprise that can start making profits from the day its doors are opened. There is usually a period of varying duration during which the cash expenses of operation exceed the cash receipts. The amount of such cash deficiency must be estimated and added to the tangible asset needs in arriving at the total funds required to get the business in operation.

Aid in Financial Planning. Reference has already been made to the many sources of published information available to individuals wishing to start a business (see page 266). However, in a few fields, several large corporations are prepared to give individual assistance to persons desiring to start in business for themselves. They not only aid in all aspects of the planning stage but carry through with advice in most phases of the co-ordination stage and then continue with active assistance after the concern is in operation. Butler Brothers in the variety and dry-goods field, United Drug Company and Walgreen Company in the drugstore field, and several of the large oil companies in the filling station field have definite programs for aiding a person to start in business for himself. The motive of these and other companies offering similar programs is not altruistic; they take on this additional function to expand their own sales and profits.

Since the services they offer encompass all the business functions, most are beyond the scope of this discussion. Table 5 shows data worked up by Butler Brothers on the initial capital needed and estimated profits and salary that could be anticipated in the first and third years for a person starting different sizes of Ben Franklin (variety) stores. These data are undoubtedly more reliable than most individual promoters could compile on their own initiative. Note that even here, however, there must still be an estimate of whether any given level of sales can be reached. Most of the companies offering these promotional services are prepared to offer expert assistance to the individual in making this estimate.

Financial Feasibility

The third and final step in the financial investigation is that of determining the financial feasibility of the prospective enterprise. It consists in

TABLE 5

AVERAGE MINIMUM CAPITAL REQUIRED FOR NEW BEN FRANKLIN STORES [a]

Item	Initial investment	Cash required	Deferred payment	Item	1st year Amount	1st year Per cent	3d year Amount	3d year Per cent
$25,000 Volume—1st Year Size of Salesroom 22 × 80 = 1,760 Square Feet								
Mdse. (opening stock)	$ 6,500	$ 6,500		Sales	$25,000	[b]	$32,000	[b]
Fixtures and equipment	5,000	2,000	$3,000	Maintained gross profit	8,500	34.0	10,880	34.0
Preopening	1,400	1,400		Expenses (exclusive of owner's salary)	5,560	22.2	6,620	20.6
Cash fund and reserve for peak mdse. requirements	1,000	1,000		Total take for owner	2,940	11.7	4,260	13.3
				Probable division:				
				Owner's salary	1,740	6.9	2,000	6.2
Total	$13,900	$10,900	$3,000	Net profit	1,200	4.8	2,260	7.1
$50,000 Volume—1st Year Size of Salesroom 36 × 100 = 3,600 Square Feet								
Mdse. (opening stock)	$12,000	$12,000		Sales	$50,000	[b]	$60,000	[b]
Fixtures and equipment	7,000	3,000	$4,000	Maintained gross profit	17,150	34.3	20,580	34.3
Preopening	1,700	1,700		Expenses (exclusive of owner's salary)	10,840	21.6	12,390	20.6
Cash fund and reserve for peak mdse. requirements	1,300	1,300		Total take for owner	6,310	12.6	8,190	13.6
				Probable division:				
				Owner's salary	2,500	5.0	3,000	5.0
Total	$22,000	$18,000	$4,000	Net profit	3,810	7.6	5,190	8.6
$75,000 Volume—1st Year Size of Salesroom 48 × 100 = 4,800 Square Feet								
Mdse. (opening stock)	$17,000	$17,000		Sales	$75,000	[b]	$90,000	[b]
Fixtures and equipment	9,000	3,500	$5,500	Maintained gross profit	26,025	34.7	31,230	34.7
Preopening	2,000	2,000		Expenses (exclusive of owner's salary)	15,425	20.6	18,050	20.1
Cash fund and reserve for peak mdse. requirements	2,000	2,000		Total take for owner	10,600	14.2	13,180	14.6
				Probable division:				
				Owner's salary	3,000	4.0	3,600	4.0
Total	$30,000	$24,500	$5,500	Net profit	7,600	10.2	9,580	10.6

[a] The figures in this table represent on a conservative basis a general average of the minimum investment capital required for new Ben Franklin stores in the volume brackets designated and of the estimated net earnings and salary yield to the owner. As these are average figures and each situation presents its own variables, they are not applicable without adjustment to any specific store. Data are based on a study made in 1942.

[b] All percentages are to sales.

SOURCE: Butler Bros.

appraising the adequacy of the profit prospects and the availability of necessary financing.

Availability of Necessary Financing. After determining the amount of assets required, the next question is: Are the means of acquiring them available? This is largely a question of *financing,* which is the subject of the following section. To the extent that the promoter has enough savings of his own to meet the full asset needs, there is no problem of financing. But to the extent that the promoter's funds are inadequate, recourse must be had to outside investors and short-term creditors. Many factors bear on the question of whether or not outside owners or long-term creditors will make funds available, but most important is the estimated earning power of the business in conjunction with the degree of risk involved. The availability of short-term credit, on the other hand, is not so much a function of earning power as it is the amount and liquidity of the current assets. Further consideration of the accessibility of short-term credit for the new business is deferred to the following section.

Adequacy of Profit Prospects. The estimated profit figure in itself means little until step 2, the estimation of financial requirements in terms of the total investment, is completed. These two figures must be related to obtain the estimate of earning power of the business. An estimated profit of $5,000 after salary of the owner might well be considered sufficient inducement to proceed with the venture if the total investment required was $15,000 but inadequate if the required investment was $60,000.

Setting aside for the moment any considerations other than the profit motive that might induce a person to start a new business, it is the rate of return that can be earned on the investment in relation to the risk involved that is the deciding factor in whether to go ahead or not. For owners this measure is the percentage of net profit (after all payments to prior claimants of income) to the residual equity.[15] The profit prospects of a new business are not usually looked upon in the same light by the promoter as by outsiders who are asked to invest funds in it. The promoter has lived with the plans since the inception of his idea. He must be reasonably optimistic by nature to wish to push ahead with a new venture. He may have other motives than those of merely earning a return on his capital, such as gaining a job for himself or family, prestige in the community, or pursuing a hobby for profit. He may be overoptimistic on the chances for success. All this adds up to the fact that he is usually willing to go ahead with the new venture on profit terms that may be unacceptable to the outsider.

A person who is asked to invest may not even know the promoter, and

[15] In arriving at net profit a salary expense for the owner should be deducted equivalent to that which he might earn were he employed elsewhere.

he may have little or no part in management. It is little wonder, then, that he looks on the venture with more objective eyes. He must balance the profit prospects in the new business with the return to be earned on alternate forms of investment. Common stocks of large going enterprises can be bought in the stock market. If the reason for investing in a new business is its earning-power outlook alone, the rate of return promised will have to be higher than that of a going business in the same field. The high risks in new businesses have been commented upon earlier. The earning power of established concerns is much more readily predicted. That of the new concern is based on estimates which can be wide of the mark. The management is often inexperienced. For these and other reasons making for high risk, the prospective rate of return on ownership funds must be high.

Too often promoters and outsiders are led to invest funds where no accurate appraisal of profits has or could be made. Millions of dollars have been lost in promotions that never got into operation because investment was made solely on the basis of the magic words "oil," "gold," or "uranium" when any impartial investigation would have shown that the chances of obtaining these minerals in economic quantities were negligible. Even in the more prosaic lines of business, such as the various branches of retailing, it takes a courageous investor and an indicated high rate of earnings to counter the established fact that one-third of all new businesses do not last a year and that 50 per cent do not last two years.

Capitalization of Income

Another method that may be used to appraise the required investment in terms of profit is a technique known as "capitalization of income." [16] By capitalizing income, a capital value is placed on a given stream of income. Thus if the estimated net income of a business is $15,000 per year and the rate of capitalization is 20 per cent, the business would be worth $75,000 on the basis of the capitalized earnings ($15,000 divided by 0.20 = $75,000). In other words, if $15,000 was received annually from an investment of $75,000, the owner would be receiving a 20 per cent return.

The higher the risk, the higher the rate of capitalization. Except in unusual circumstances, the promoter seeking equity funds would find that investors would capitalize the projected earnings of his firm at a higher rate than those of firms already in the field. For example, if the organizer of a paper box factory after careful planning determined that he had to raise funds of $100,000 beyond that which he could obtain on

[16] This subject is treated more fully on pages 510 to 514 in connection with arriving at the value of a going concern for purposes of sale.

credit and that the estimated annual return available for owners was $20,000, he could make a rough estimate of the terms on which he might secure equity funds. By checking with security dealers he finds the prices at which recent sales of stock in small local box companies had occurred in the over-the-counter market. The prices and the average earnings per share for the last four years were:

Company	Selling price per share	Average earnings per share
Yorktown Folding Box Co.	$12	$2.40
Seeber Carton Co.	20	3.60

$2.40 / $12.00 = .20 or 20%

$3.60 / $20 = .18 or 18%

Purchasers of the stock of these companies were thus capitalizing the average earnings of the recent past at 20 per cent and 18 per cent, respectively, for Yorktown and Seeber. It is thus extremely unlikly that the promoter could sell stock in his new business on the basis of better than an estimated 20 per cent return. More likely, he would be forced to offer the hope of 25 per cent or more in prospective earnings because of the greater risks of a new business.

Assume that he could interest outsiders at a 25 per cent return and that he had to raise $50,000 from them to go with the $50,000 of his own savings. He would have to allot more than 50 per cent of the stock to the outside stockholders. The division would have to be as follows:

Source of funds	Funds invested	Shares of stock	Estimated earnings per share	Total earnings
Outsiders	$ 50,000	$8 per share 6,250	$2	$12,500
Promoter	50,000	3,750 13.33 per share	2	7,500
Total	$100,000	10,000	. .	$20,000

$50,000 × 1/4

7,500 / 50,000 = .15 or 15%

On their $50,000 investment the outside stockholders would have estimated earnings of $12,500, or a 25 per cent return. The promoter, on the other hand, would receive only $7,500 for his $50,000 investment, or a 15 per cent return. Unless the shares sold to outsiders could be made nonvoting, the promoter might easily lose control if the other stock-

holders chose to vote as a group. An analysis such as this could lead to the dropping of the idea for this manufacturing enterprise unless funds could be obtained on more advantageous terms in some other manner.[17]

Raising the Funds

The third and final step in the promotion of a business is that of *organization of the production factors.* It consists in coordinating all the elements that must be assembled to make a going enterprise. It includes the raising of funds; filing of organization papers, if any; securing licenses; renting or purchasing a building; ordering, assembling, and installing machinery, fixtures, and equipment; selecting and training employees; arranging for advertising; and the placing of orders for inventory. Of these, the raising of funds is the primary financial problem.

The general topic of the financing of business is the subject of Chapters 13 to 21. The various sources of funds, their relative importance, and the details of the conditions under which each source is used and what the businessman must do to obtain funds are examined at length in these chapters. This section on the raising of funds for new business will therefore dwell only on the special problems encountered in the *initial financing.*

The Problem of Adequate Funds. The difficulty of raising funds for a new firm has already been touched on. Of all the problems faced by promoters, this is the most universal and at the same time the most serious. A certain minimum amount of funds is needed to start any business. This varies with the type of assets required in the particular line of business, the scale of operations, the price level, credit terms granted and received, and many other factors. A promoter may secure funds in sufficient quantity to permit his business to open its doors but lack enough to get it over the initial period of deficit operation.

Financing for the *new* business is such a major problem because all or most of the funds necessary for business life must be raised at one time. The financing problems of an established business are much less difficult in comparison. For the static business, financing involves merely the securing of funds to take the place of those paid out on maturing liabilities. There is no problem of raising equity funds, which constitute the largest proportion of all funds in most businesses. Seasonal and cyclical factors add some complications, but again the amount of new money raised is small in comparison with that already invested. The new firm has no name with publicity value to aid in attracting funds. The new

[17] One possibility discussed in more detail on page 499 is the use of preferred stock for outside investors with a bonus of common stock to compensate for the high risk.

business suffers in comparison with an established business in that there is no past record of management capabilities and earning power. New businesses are small on the average because they cannot secure financing easily, and at the same time one of the main reasons for the difficulty of obtaining cash is their small size. The record of business failures has shown that in any particular line, the smaller the firm, the greater the risk. And the result of the great risk is the lack of suppliers of credit or equity.

Sources of Funds. The Department of Commerce has assembled the most comprehensive data on the sources of funds for new business in recent years. Two sample surveys (of over 1,000 firms each) of new businesses, one for trade firms starting in the 1945 to 1947 period, and one for manufacturing firms starting in the 1946 to 1948 period, were used as a basis for estimating sources of initial funds for the whole population of new firms in each field.[18] Selected data from these surveys are used in the following discussion.

PER CENT OF TOTAL INITIAL INVESTMENT SUPPLIED BY EQUITY FUNDS [a]

Type of enterprise	Personal savings	Stock	Total
Retail	56	7	63
Wholesale	38	22	60
Manufacturing	24	42	66

[a] "Investment" as used in the Department of Commerce surveys consists of the total of the short- and long-term credits and net worth.

SOURCE: Lawrence Bridge, "Capital Requirements of New Trade Firms," *Survey of Current Business*, December, 1948, p. 23; and Lawrence Bridge and Lois E. Holmes, "Capital Requirements of New Manufacturing Firms," *Survey of Current Business*, April, 1950, p. 17.

Promoters. The promoters, the proprietors, partners, or officers and directors of new firms, must count on supplying the bulk of the funds needed from their personal savings. It is extremely difficult to interest outsiders, those who will not be connected with the business through direct participation in management. For most people with limited funds, the large risk connected with new ventures does not warrant such investment. The difficulty of disposing of an interest in a small business, even if successful, offers obstacles which, when accompanied by high risk, bars all but a few from such investment.

The heavy dependence on equity funds is illustrated by the accompanying table.

[18] Bridge, *op. cit.*, pp. 18–24, and Bridge and Holmes, *op. cit.*, pp. 11–18.

These data understate the reliance on equity funds and particularly that proportion supplied by personal savings because owner-operated establishments with no paid employees were omitted in the sampling.[19] Tables 6 and 7 show an inverse correlation between business size and the per cent of funds supplied by personal savings of the entrepreneurs. Table 6 does not, like Table 7 on manufacturers, contain a separate breakdown

TABLE 6

TRADE FIRMS STARTING OPERATIONS IN THE 1945 TO 1947 PERIOD [a]

Percentage Distribution of Sources of Initial Investment Funds, by Initial Investment Size

Line of trade and initial investment size	Sources						
	Total	Personal savings	Capital stock	Supplier credit	Bank loans	Mortgage loans	Other
Wholesale	100	38	22	18	10	1	12
Under $20,000	100	72	2	11	7	[b]	8
$20,000–$49,999	100	63	17	2	12	[b]	5
$50,000 and over	100	30	25	22	10	1	13
Retail	100	56	7	10	14	2	11
Under $10,000	100	70	1	7	10	1	11
$10,000–$19,999	100	65	2	9	11	1	12
$20,000–$49,999	100	57	8	9	16	2	8
$50,000 and over	100	42	11	14	17	4	12

[a] Excludes firms with no employees. Detail will not necessarily add to 100 per cent because of rounding.

[b] Under 0.5 per cent.

SOURCE: Lawrence Bridge, "Capital Requirements of New Trade Firms," *Survey of Current Business,* December, 1948, p. 23.

of the per cent of capital-stock funds supplied by officers and directors. There is little doubt, however, that in most instances these funds came from those directly associated with the business.

More than 45 per cent of the trade firms and 47 per cent of the manufacturing firms were financed entirely through personal savings or through capital-stock subscriptions of officers and directors. These figures

[19] The sample firms were selected from the records of those paying taxes to the Bureau of Old Age and Survivors Insurance, Federal Security Agency. Firms without employees generally had no occasion to report to BOASI until 1951.

TABLE 7

MANUFACTURING FIRMS STARTING OPERATIONS IN THE 1946 TO 1948 PERIOD [a]

Percentage Distribution of Sources of Initial Investment, by Legal Status and Initial Investment Size

Item	Corporate				Noncorporate			
	Under $20,000	$20,000–$49,999	$50,000–$99,999	$100,000 and over	Under $10,000	$10,000–$19,999	$20,000–$49,999	$50,000 and over
Sources, total	100	100	100	100	100	100	100	100
Personal savings	...	...	...	...	68	61	63	55
Capital stock:								
Officers and directors	74	70	58	34				
Parent company	5	6	9	18				
General public	2	1	5	8				
Suppliers' credit:								
Merchandise	1	3	4	4	2	7	3	6
Equipment	4	4	3	5	7	9	4	6
Bank loans:								
Nonmortgages	2	2	4	4	6	4	7	11
Mortgages:								
On business properties	1	2	5	11	2	3	10	6
On other properties	[b]	[b]	1	1	2	1	3	2
Others [c]	12	12	10	15	13	15	10	15

[a] Excludes firms with no employees. Detail will not necessarily add to totals because of rounding.
[b] Less than 0.5 per cent.
[c] Includes small amount of bond sales and nonbank mortgages.
SOURCE: Lawrence Bridge and Lois E. Holmes, "Capital Requirements of New Manufacturing Firms," *Survey of Current Business*, April, 1950, p. 17.

are an understatement of the proportion of businesses that were financed 100 per cent by personal savings because of the omission of the no-employee firms from the sample. The understatement for trade firms is greater than that for manufacturing firms because of the greater proportion of single owner-operated establishments in that field.

Other sources of equity funds for new businesses are personal savings of friends and relatives, parent companies, and outside investors. The promoter may obtain funds from those who know him when they are unobtainable elsewhere. These funds may take the form of equity or a loan. For the sole proprietor, these funds must of course take the loan form. In a partnership, friends and relatives who are not going to participate in management might become limited partners. The corporation offers somewhat more freedom in securing equity from this source. From the standpoint of total funds supplied, friends and relatives constitute a rather small proportion, and they are more important in small than in large firms. In the Department of Commerce survey of sources of investment funds of new trade firms, it was found that one-sixth of the firms supplemented personal savings of the promoter with those of relatives and friends.[20]

Parent companies, in establishing subsidiaries, would ordinarily supply all the equity funds. Parent companies are also important suppliers of credit to their subsidiaries. Their relative importance in the manufacturing field is apparent from Table 7. They supply more of the equity in large than in small corporations. The problems of promotion for a parent establishing a new subsidiary are more akin to those of expansion. Further consideration can therefore be deferred to the discussion of financial problems of expansion, which is the last subject of this chapter.

Stock sales to outsiders (other than directors, officers, and their friends and relatives) play a minor role in supplying funds to new business. Stock subscription to wholesale firms (Table 6) accounted for 22 per cent of the funds raised, and for retail firms the corresponding figure was 7 per cent. For the trade firm sample as a whole, capital-stock subscription accounted for 14 per cent of the investment and was reported by only 4 per cent of the number of firms. As previously pointed out the largest share of these subscriptions is supplied by the promoter, other officers and directors, friends and relatives, or parent companies. The new corporation virtually has no access to the capital markets through investment bankers; the promoters must rely on their own efforts to raise outside equity funds. The fee of the banks in relation to the amount of money to be raised is prohibitive for the typical small venture. It is only where the amount to be raised is quite large that public sale through investment banking chan-

[20] Bridge, *op. cit.*, p. 20.

nels can be used. The original sale of stock in the Kaiser-Frazer Company by Otis and Company, investment bankers, in 1945, and the sale of stock in the ill-fated Tucker Corporation in 1947 are examples of large-scale public sale of securities in a new venture. Because of the risk in the latter case, the investment bankers refused to underwrite the sale and did not sell all the stock offered.

Table 7 on manufacturing firms also illustrates the minor role played by outside stock sales. Of the 1,100 new manufacturing firms included in this survey only one raised funds by the sale of a sizable public issue. This was an automobile company and accounted for one-fourth of the estimated stock sales to the general public.[21]

Credit Sources. The credit sources most frequently available to new businesses are loans from relatives and friends, bank loans, and trade credit from suppliers of inventory and equipment. The amount of credit available is a function of risk. Ordinarily the smaller the business, the lower the percentage of funds that can be borrowed. This is borne out by the data on new retail, wholesale, and manufacturing businesses included in Tables 6 and 7. The amount available from different lenders depends on the type of business, which in turn determines in part the asset composition and its suitability as security for a loan. Data for new retail stores and new manufacturing firms included in Department of Commerce sample by type of business are shown in Tables 8 and 9.

In analyzing Tables 8 and 9 it must be remembered that the percentages shown are based on the volume of funds secured from each source. As previously mentioned, this survey excluded all new firms with no employees. Since the no-employee firms are smallest in size, it would be expected that the percentage of funds obtained by borrowing would be smaller than the percentages shown here. Then, too, the table shows the average per cents for each trade, not the number of borrowers and nonborrowers from each source. Only one out of every four firms in the trade survey received bank loans. While these loans accounted for 12 per cent of the investment of all firms (both wholesale and retail) in the sample, they accounted for 32 per cent of the investment of firms receiving bank credit. Of the manufacturing firms, only one in five reported receiving bank credit. But while bank credit was 15 per cent of the initial capital requirement for all businesses, it was 35 per cent for the firms using bank credit.[22]

In both surveys bank credit was in general utilized to a greater extent proportionately by firms with a larger investment in fixed assets, by the larger concerns, and, for a given sized company, by noncorporate firms

[21] Bridge and Holmes, *op. cit.*, p. 13.

[22] Bridge, *op. cit.*, p. 20; Bridge and Holmes, *op. cit.*, p. 14.

TABLE 8

TRADE FIRMS STARTING OPERATIONS IN THE 1945 TO 1947 PERIOD [a]

Distribution of Sources of Initial Investment Funds by Line of Trade

Item	Retail trade						
	All stores	Building materials group [b]	Automotive stores	Home furnishings group [c]	Food stores	Apparel stores	Eating and drinking places
Sources	100	100	100	100	100	100	100
Personal savings	56	54	57	70	51	63	52
Capital stock	7	11	13	8	2	9	1
Supplier credit	10	4	6	6	11	16	14
Bank loans	14	16	12	12	20	5	15
Mortgage loans	2	4	3	1	2	[d]	2
Other	11	11	9	3	13	7	16

[a] Excludes firms with no employees. Detail will not necessarily add to totals because of rounding.

[b] Includes hardware and farm implement stores.

[c] Includes furniture, house furnishings, and household appliance stores.

[d] Less than 0.5 per cent.

SOURCE: Lawrence Bridge, "Capital Requirements of New Trade Firms," *Survey of Current Business*, December, 1948, p. 23.

for which such credit was perhaps more readily available as a result of their unlimited liability.[23]

Credit is received on inventory and equipment purchases. Credit from either class of suppliers would tend to bear a direct relation to the proportion of inventory and equipment to total asset needs. Thus in Table 9 it is apparent that equipment suppliers furnished more than twice as much of the capital needs of the new manufacturers as did inventory suppliers. For these same firms, 42 per cent of all funds obtained was utilized for equipment, and only 15 per cent for inventories. While no breakdown of the proportion of credit from inventory and equipment suppliers is available for the trade firms, it is logical to believe that the former would be more important here because of the greater importance of inventory in the total assets.

[23] *Ibid.*

TABLE 9

MANUFACTURING FIRMS STARTING OPERATIONS IN THE 1946 TO 1948 PERIOD [a]

Percentage Distribution of Sources of Initial Investment Funds by Industry

Item	All industries	Food and kindred products	Textile-mill products	Apparel and related products	Lumber and timber basic products	Furniture and finished lumber products	Leather and products	Stone, clay, and glass products	Metals and metal fabricating [b]	Machinery	Transportation equipment
Sources	100	100	100	100	100	100	100	100	100	100	100
Personal savings	24	28	12	20	41	19	21	27	20	14	24
Capital stock	42	30	56	56	15	61	55	32	57	59	52
Bond sales	1	1	[c]	3	[c]	1	[c]	4	[c]	[c]	[c]
Supplier credit:											
Mdse.	3	3	2	1	2	3	5	2	4	4	4
Equipment	7	8	3	6	11	2	3	6	4	2	2
Bank loans:											
Nonmortgage	5	7	2	2	14	3	4	10	3	1	6
Mortgage:											
On business property	5	11	11	1	3	1	2	5	2	10	1
On other property	2	3	3	2	4	[c]	1	2	1	1	[c]
Other sources	11	9	12	10	10	10	10	11	8	10	12

[a] Excludes firms with no employees. Detail will not necessarily add to totals because of rounding.

[b] Excludes machinery and transportation equipment.

[c] Less than 0.5 per cent.

SOURCE: Lawrence Bridge and Lois E. Holmes, "Capital Requirements of New Manufacturing Firms," *Survey of Current Business*, April, 1950, p. 17.

Loans from relatives and friends are most important in the smallest sized firms. The amount that can be obtained from this source by the promoter is usually quite limited. This source, when available, has the advantage that the creditors are less likely to insist on prompt payment when it would jeopardize the continued existence of the firm. Parent companies in establishing subsidiaries make funds available in the form of loans as well as in that of stock subscriptions. When a parent-subsidiary relationship exists, the problems of financing for the new firm would probably be slight as compared with those of an independent venture. The subsidiary can always look to the parent for financing and thus has less need for outside funds.

Bond sales are not a usual source of funds for the new business. They are available only to corporations; are not a suitable instrument for raising a small sum of money; and because they are characteristically long-term, would be difficult to sell by the uncertain new enterprise. When used, sale would be most logical through private placement and would be likely to rest on mortgage security. Table 9 shows their negligible importance in the manufacturing field.

Two other sources of financing should be mentioned although they are of minor significance in the over-all picture. These are industrial foundations, or regional and local development companies, and investment development companies.

The purpose and functioning of an industrial foundation has been well summarized as follows:[24]

> An industrial foundation is a community finance corporation set up to carry on and extend the services customarily provided by chambers of commerce in the industrial development of their communities. The primary purpose of the industrial foundation is to bring new industrial enterprises into the community, although it may also be interested in assisting local manufacturing firms. It achieves its purpose primarily by financing requirements for factory space. It may also furnish other aid by leasing or selling industrial sites at or below cost, by loans or other financial aid, and by providing managerial assistance, subsidies such as free rent or land, and exemption from property taxation. The fundamental objective of an industrial foundation, therefore, is to increase the payrolls of the community by developing the community industrially.

A 1948 study showed 72 industrial foundations in existence plus 32 less formal community financial plans.[25] For the most part they are nonprofit organizations. Since the primary purpose of these corporations is to increase the local payroll, financial help is extended to new, relocating, and

[24] "Industrial Foundations," *Monthly Review*, Federal Reserve Bank of Boston, Vol. 32, January, 1950, pp. 1–4.

[25] *Ibid.*, p. 2.

locally established businesses. Some foundations help industries by leasing plant at a lower rate than is customary through ordinary business channels. Other foundations provide loans to firms by accepting a type of risk more marginal than that desired by banks and by lending for longer periods and in larger amounts in ratio to the value of security than is customary with banks. Others make direct investment by purchase of stock.

In addition to real-estate, lending, or stock investment activities, a number of community agencies give subsidies in the form of free land, free use of buildings, or free water or other utilities. In some cases the foundations are empowered by law to offer exemption from property taxes. The effect of these subsidies is to reduce the amount of financing that would otherwise be required.

Investment development companies are comparatively few in number.[26] Their primary purpose is to supply equity funds to new and growing concerns that cannot otherwise obtain them. The owners of the development companies hope to benefit by realizing capital gains on the investments they make. Most of the investments of these organizations have been made in manufacturing concerns. They prefer to invest in businesses with new products or processes or making use of new ideas with competitive advantages. In addition to financing, these development companies provide expert management counsel and guidance. Because of their small number and restricted interests it is apparent that these investment development companies are not available as a possible source of funds to the vast majority of new enterprises.

Special Considerations in Expansion

Similarity of Financial Problems to Those of Promotion. The expanding business has problems of planning and financing similar to those of new enterprises. An owner will not expand unless he believes such enlargement of operations will be profitable. When the expansion is going to involve a large cash outlay for additional assets, an owner will at a minimum say to himself: "Is it worth it?" Appraising the desirability or worth of an expansion program resolves itself into an estimate of the future profit, an estimate of the additional asset investment required, and, relating estimated profit to investment, a determination of whether or not the rate of return on the new investment will be sufficient to warrant the risk of committing more funds to the enterprise.

[26] Carl A. Dauten and Merle T. Welchans list 11 principal companies in their "Investment Development Companies," *Journal of Finance*, September, 1951, p. 277.

A good example of the balancing of future profit against future investment is that of the aluminum industry's expansion to meet defense needs in 1951–1952. With the planning of a greatly enlarged defense program as a result of the situation in Korea, it soon became evident that production of aluminum would have to be more than doubled, and as rapidly as construction and materials shortages would permit. The government not only called on the three existing producers to increase capacity but tried to encourage new companies to enter the field.

There was no question but that the Aluminum Company of America, Reynolds Metals Company, and Kaiser Aluminum and Chemical Company could sell the output of new plants at a profit as soon as they could be put into operation if the defense needs were as planned. The companies were, however, hesitant to undertake this tremendous expansion program. It takes one to two years to bring a new plant from the drawing board to completion. There was always the possibility that the international situation would change for the better and that defense spending would be curtailed. Or if all the initial output of the new plants was taken for defense purposes as planned, there was no assurance how long this demand would continue. There appeared to be little assurance that civilian demands would increase sufficiently to absorb the increased production for a number of years. In other words, the estimate of future profits from new plants did not appear high enough to warrant the investment of the large amount of funds that would be required.

The government took two steps to overcome this reluctance on the part of the industry. It provided for emergency amortization of the new facilities over a five-year period, and for a portion of the new output it guaranteed to buy at a fixed price any that the companies could not sell for a period of five years. The producers were thus assured of recovering the cost of their new plants in five years as long as their selling price exceeded all costs of production, including the accelerated depreciation, and by the guarantee of a market, recovery of cost of plant was assured as long as costs did not rise above the stipulated selling price. The government, by thus reducing the risks, induced the industry to proceed with the expansion program.

Just as for new ventures, once the planning has been done and the decision made that the expansion will be sufficiently profitable, the determination of asset need, raising of funds, purchase of assets, training and hiring of additional labor, and other jobs have to be accomplished. The final financial step in expansion, the raising of funds, is sufficiently different from that of raising of funds for the new business to warrant further comment.

Differences from Promotion. In expansion one is dealing with a going business. This makes easier all the financial functions of planning and financing. In fact, the performance of these functions differs only in degree from those of any other established business. The greater and more rapid the contemplated expansion, the more difficult it is to plan with accuracy and provide the requisite funds. Almost any business can assume a small increase in sales that would require no additional financing. On the other hand, providing for a rapid sales increase brings forth problems more akin to those of the new venture. This is particularly true if the business is taking on a new line of activity.

In expansion as contrasted to promotion the business has a record of past experience to draw on in forecasting the future. There is a going organization; management has some idea of its capabilities and limitations; relations have been established with sources of supply; and internal operating ratios are known so that there would be less need to use competitors' or industry-wide figures in projecting or checking results.

In financing, too, the expanding business has a decided "edge" over a new business. It will already have an established relationship with a commercial bank. There is an earnings and credit history available which can be shown to prospective creditors and owners who will be asked to furnish funds for the expansion. Assuming that the financial record has been favorable, it will be much easier to secure additional funds, and they can be obtained on better terms. The expanding business will have access to a wider list of financial institutions for credit, and having made a name for itself in its local community, it may be able to secure additional ownership funds from local citizens which were not forthcoming when it was first organized. Unless the expanding company is of some size and the need for new funds large, it, like the new venture, will have difficulty in selling bonds or stock to the public through investment bankers.

Summary

This chapter has pointed out the unique financial problems encountered by new and expanding businesses. Promotion is the first phase in the life cycle of any business. After the first conception of the idea, extensive investigation and planning must be undertaken by a promoter before he can assemble all elements that go to make a business a coordinated, functioning enterprise. The successful conclusion of the promotion, just like the successful operation of a going business, can be aided immeasurably by careful planning. The financial aspects of this planning are similar to those of any established business in that a comprehensive plan would embrace an estimate of operations (estimated profit and loss statement), an

estimate of total assets needs and sources of funds (the estimated balance sheet), and an estimate of the timing of cash receipts and disbursements (the cash budget). However, this financial planning differs from that of established firms in one essential respect, namely, the difficulty of making the estimates. For the completely new business, there is no past record of operations on which to base estimates of sales, expenses, or profits; there is no assemblage of assets, most of the components of which will be changed only moderately up or down by operations for the coming year.

It is this difficulty of having to start the plan from scratch, so to speak, plus the lack of experience in any kind of financial planning by most promoters, that contributes to the high rate of failure among new businesses. Because of these difficulties, thorough planning is not undertaken in many cases. As a result firms are started which have little hope of profitable operation, or if profits are realized, they are not up to the promoter's expectation. Or in many cases a business is started with inadequate financing; the owner runs out of cash before the cash inflow has balanced the operating cash disbursements. The business fails with perhaps 100 per cent loss to the owner, or he is forced to sell all or part of his interest at considerable sacrifice in order to keep the concern operating.

Once the planning for a new venture has been completed and the decision made to go ahead, the second principal financial problem in promotion is encountered: the raising of funds. Here again the problem is much more serious than in an established business. Not only must most of the funds the business is going to need during its early life be raised at one time, but they must be raised from new sources. Unlike the going concern, the new business does not have any owners to supply additional funds; it has no contact with a commercial bank, trade or equipment suppliers, or any of the other institutions that may have provided funds for a going business.

Because of the lack of contacts and the need for large amounts of cash, new businesses must rely for the bulk of their requirements on the savings of the owner or owners. The high risk attached to a new business keeps both suppliers of outside equity funds and creditors away. When they are willing to advance money, it is generally only in comparatively smaller amounts and on more onerous terms than as supplied to established firms.

The position of the rapidly expanding firm in the matter of financial planning is midway between that of the new venture and a nonexpanding established business. When expansion is in a completely new field unrelated to the past operations, the financial problems come close to those encountered in promotion; expansion in an established line raises problems only slightly different from those of day-to-day operations. In any

event, however, there will be need for careful attention to the matters of origination of the plan for expansion, investigation of its profit prospects and financial requirements, and coordination of all its elements toward achieving the desired end, including the all-important function of financing the asset requirements. In other words, the problems of expansion in relation to those of promotion will differ not in kind but only in degree.

Questions

1. Why should promotion be treated as a special subject of finance?
2. Why is it reasonable to consider the problems of promotion and expansion at this particular stage of the book?
3. How do promotion and expansion differ? In what important ways are they related?
4. Do intelligent promotion and expansion of business enterprises have significant social value? Explain.
5. What are some common motivations underlying promotions?
6. What are the steps involved in any promotional endeavor?
7. Select a business endeavor of your own, and develop in substantial detail how you would proceed to promote it.
8. Why is it generally easier to estimate costs than revenue?
9. Compare the relative attributes of the cash budget method and the ratio method of estimating cash requirements.
10. What is involved in determining the financial feasibility of a contemplated promotion?
11. Devise and calculate a simple problem of your own which illustrates adequately the applicability of the capitalization of income principle.

PART IV

SHORT-TERM FINANCING OF ASSET REQUIREMENTS

Chapter 13. PRINCIPLES OF SHORT-TERM FINANCING

The two preceding sections (Parts II and III) have dealt with two of the three primary financial functions of management, financial planning and financial control. Also included was an analysis of the administrative tools, financial statements and budgets, to show their method of use and value in financial administration. This and the following chapters take up in some detail the third major financial function—financing, the raising of funds for the business. Here, too, the administrative tools play a definite part.

For purposes of study, financing may be conveniently divided into three categories, short-term, intermediate-term, and long-term financing. Each will be treated separately. While a single firm at the same time may be using funds obtained on a short-, intermediate-, and long-term basis, the conditions under which these funds are obtained, the sources from which they are obtained, and the purposes for which they are used are sufficiently different to warrant individual treatment.

Nature of Short-term Financing

Short-term financing embraces the borrowing or lending of funds for periods of one year or less in duration. Short- and intermediate-term financing differ from long-term financing in that the latter includes the acquisition of ownership funds for the business. The contribution of proprietors, partners, and stockholders is classified as a permanent investment in the business and thus is automatically excluded from the definition of short-term financing.[1] Short- and intermediate-term funds are always secured as a result of a credit transaction. There is always a promise to repay a specific sum by the borrowing firm.

Importance in Present-day Practice. Current liabilities have been defined (Chapter 3) as those liabilities coming due within one year. The current liabilities as shown on a balance sheet thus indicate the amount

[1] Partners and stockholders may make short-term loans to the business. From the standpoint of the partnership, loans by partners are regarded as debts of the business, but partnership creditors regard them as part of their margin of protection, just like the partners' capital accounts, because all the partners' claims are subordinate to creditor claims. It is also possible that so-called "permanent" funds from owners may be returned to owners if not needed in the business and not forbidden by law or debt contracts. Such funds may also be dissipated by operating or other losses.

of short-term credit being utilized by the business on that date. Comprehensive data to show the importance of short-term financing for all business enterprise are not available. However, the tables below indicate its importance in certain areas for which information may be obtained, and they may be used for arriving at general conclusions as to its relative significance in different types and sizes of business.

While the use of short-term credit is, in a sense, optional, all business firms make use of long-term funds. The owners must make an investment, however small, before a business is started. The amount of this ownership investment will have a bearing on the amount of credit the firm can obtain, both long-term and short-term, because as pointed out in Chapter 2 it is a margin of protection for creditors. Nevertheless, the relative amount of credit obtainable will vary greatly with the reputation of the owner for honesty and business ability. Although not obligatory in the

TABLE 1

TOTAL ASSETS AND CURRENT LIABILITIES OF 1,322 LISTED CORPORATIONS, DECEMBER 31, 1948 [a]

Corporations	No. of companies	Total assets (000,000,000 omitted)	Current liabilities (000,000,000 omitted)	Current liabilities to total assets, per cent
All companies	1,322	$76.3	$14.8	19.4
Manufacturing companies	979	64.5	11.7	18.2
Nonmanufacturing companies	343	11.7	3.0	25.7
Retail trade	136	5.3	1.3	24.5

[a] Several important groups of corporations exempt from the filing requirement and thus excluded from the table are public-utility companies, common carriers, and insurance and investment companies.

SOURCE: Securities Exchange Commission, *Survey Series Release No.* 154, for release May 27, 1949.

same sense as the requirement of an owner investment, it is safe to say that practically all enterprises will show some current liabilities. The amount may be so nominal as to represent no use of formal credit, but rather such items as wages and taxes accruing but not yet due and amounts for goods which will be paid as rapidly as invoices are checked and within what is known as the "cash terms," a period which is ordinarily within a few days after the receipt of the goods.

Table 1 shows the total assets and current liabilities of 1,322 corporations listed on stock exchanges in the United States and filing financial

data with the Securities Exchange Commission for 1948 under provisions of the Securities Exchange Act. This table illustrates the importance of short-term credit for the country's largest business establishments. The corporations whose securities are listed for trading on the stock exchanges are the large business units whose securities are widely held by the public. Short-term credit for all these equaled approximately one-fifth of funds used. When the total is broken down, it is evident that the manufacturing companies made relatively less use of short-term credit than other types of business, only 18.2 per cent of their assets being supplied by that source as against 25.7 per cent for the nonmanufacturing group. Retail trade, which accounted for about 40 per cent of the nonmanufacturing companies by number and 45 per cent by assets, showed a per cent very close to the latter average, or a ratio of current credit equal to about one-fourth of total assets.

TABLE 2

ESTIMATES OF TOTAL ASSETS AND CURRENT LIABILITIES FOR ALL UNITED STATES MANUFACTURING CORPORATIONS BY ASSET SIZE, DECEMBER 31, 1950

Size of business, total assets	Total assets (000,000 omitted)	Current liabilities (000,000 omitted)	Current liabilities to total assets, per cent
Under $250,000	$ 2,658	$ 806	30.3
$250,000–$1,000,000	6,546	1,759	26.9
$1,000,000–$5,000,000	13,869	3,526	25.4
$5,000,000–$100,000,000	41,178	9,649	23.4
$100,000,000 and over	62,028	13,494	21.7
Total	$126,278	$29,234	23.2

SOURCE: Federal Trade Commission and Securities Exchange Commission, *Quarterly Industrial Financial Report Series—for All U.S. Manufacturing Corporations.*

Table 2 illustrates the variation in the use of short-term funds by size of business for all manufacturing corporations. The smallest companies obtained 30.3 per cent of their funds from short-term sources. As the size of the firm increases, short-term credit was relatively less important, accounting for only 21.7 per cent of total assets for companies in the 100-million-dollar and over asset-size category.

While Table 2 presents data only for manufacturing corporations, this tendency for greater use of short-term financing among small concerns

and lesser use among larger concerns is prevalent in practically all types of business. It is probably accounted for by the greater difficulty that small-sized businesses have in raising long-term funds resulting from (1) lower *average* credit standing and (2) the relative impermanence of many small units. Another factor, making for the lesser use of short-term funds in large corporations is that in publicly owned corporations management does not mind so much the spread of voting control to outsiders. It is under less pressure to maximize return on the equity and has more desire for corporate financial safety, which is essential to preserve its jobs. Because of the greater economic effects of the failure of a large corporation, it is probably socially desirable to reduce the risk of financial failure of our business giants. The probable greater use of rented facilities by small business and thus the higher proportion of current to fixed assets also contribute to the larger use of short-term credit. As the size of the firm increases, it is easier to tap long-term sources. When long-term funds are available, they avoid the hazard to solvency that exists in the constantly recurring problem of payment or renewal of short-term debt.

Advantages of Short-term Credits

The fact that short-term funds are used so frequently and in such volume would indicate that there are advantages in their use as compared with long-term financing. These advantages fall into two groups, those which arise from the time factor (length of loan) and those which arise from the fact that short-term financing always involves an extension of credit, while the bulk of long-term funds is supplied by owners. There is some overlapping between the two categories. The latter group of advantages, (1) no sharing of control, (2) low cost because of the priority of creditors in general, (3) availability, (4) flexibility, (5) tax savings, and (6) convenience, were examined in Chapter 2 and need not be analyzed again here except for the points of flexibility and convenience, which also fall in the first group. The place of short-term financing in the "trading on equity" concept also needs elaboration.

Advantages Arising from Shortness of Term

1. *Easier to obtain.* For most firms it is easier to secure short-term funds than long-term funds because creditors advancing funds for a few weeks or months generally *assume less risk* than on longer loans. There is less chance of a substantial change in the credit standing of the borrower occurring before maturity because of a change in his competitive position or because of a change in general economic conditions.

Some short-term trade credit arises for the majority of business establishments as a result of the manner in which business is conducted. There are three ways in which this occurs. First, the bulk of the sales between manufacturers, wholesalers and retailers are credit sales, that is, goods are shipped and payment for them is not received until a later date. This arrangement involves a formal passing on credit, as we shall see in Chapter 14. The purchaser obtains an asset, Inventory, and establishes an offsetting liability, Accounts Payable. Thus, an Accounts Payable liability appears even though the interval is not for a full credit term but only about long enough to allow for the interval necessary for the shipment and inspection of merchandise and the transmittal of a remittance, say a period of 5 to 10 days.

Second, most of the employees of business firms are paid weekly, biweekly, or monthly. In the interval between paydays for a manufacturing concern the laborer is adding to the value of the assets by converting raw material into finished goods of higher value. In the case of a wholesaler or retailer, the employees add to the total value of the assets by selling, or rendering services essential in the sale of, merchandise for a larger amount than was paid for it. The value of these services appears in the balance sheet as Accounts Receivable or cash replacing the inventory at a higher figure. As the work is performed, the current liability, Accrued Wages, is increased. An employee who is paid every two weeks is, in effect, extending credit to his employer for an amount which averages one week's wages during the two-week period he waits for his pay.[2]

A third way in which short-term credit is obtained more or less automatically in the ordinary course of business is the result of other expenses accumulating for a period before they actually become due and require repayment. Such accumulating but unpaid amounts appear as accruals under the current liabilities. Except for the item of income taxes in the case of corporations, they are ordinarily small amounts. Because of the occasional uncertainty in the amount of tax liability, that item often appears as Reserve for Income Taxes instead of Accrued Income Tax Liability as it should to avoid misleading those unfamiliar with the accountant's special terminology with respect to the word "reserve." The word "estimated" would be preferable to "reserve for."

The flow of transactions which give rise to such an accrual of tax liability is illustrated by the profit and loss statements and balance sheet in Exhibit I. Assume that a corporation which had previously operated

[2] Actually credit is extended for an 11-day period if he works a 5-day week and begins on a Monday and is paid on a Friday. Some large manufacturers, whose payroll accounting is a problem, give themselves an extra week's delay to figure time and payroll owing.

Exhibit I

Illustration of Tax Accrual as a Source of Funds

Profit and Loss for Quarter Ending

Item	(1) Jan. 1	(2) Mar. 31	(3) June 30	(4) Sept. 30	(5) Dec. 31	(6) Mar. 31	(7) June 30
Sales	......	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Operating expenses	......	900	900	900	900	900	900
Operating profit	......	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100
Federal income taxes	......	40	40	40	40	40	40
Net profit	......	$ 60	$ 60	$ 60	$ 60	$ 60	$ 60

Cash Receipts and Disbursements

Item	(1) Jan. 1	(2) Mar. 31	(3) June 30	(4) Sept. 30	(5) Dec. 31	(6) Mar. 31	(7) June 30
Cash receipts:							
From receivables	......	$ 150	$ 150	$ 150	$ 150	$ 150	$ 150
From sales less those uncollected at end of quarter	......	850	850	850	850	850	850
Total receipts	......	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000
Cash disbursements:							
Operating expenses	......	$ 900	$ 900	$ 900	$ 900	$ 900	$ 900
Dividends	......	60	60	60	60	60	60
Federal income taxes	......	...	...	...	...	40	40
Total disbursements	......	$ 960	$ 960	$ 960	$ 960	$1,000	$1,000

Balance Sheet as of End of Quarter

Item	(1) Jan. 1	(2) Mar. 31	(3) June 30	(4) Sept. 30	(5) Dec. 31	(6) Mar. 31	(7) June 30
Assets:							
Cash	$ 50	$ 90	$130	$170	$210	$210	$210
Receivables	150	150	150	150	150	150	150
Inventory	200	200	200	200	200	200	200
Total current assets	$400	$440	$480	$520	$560	$560	$560
Fixed assets	220	220	220	220	220	220	220
Total assets	$620	$660	$700	$740	$780	$780	$780
Liabilities and net worth:							
Accounts payable	$100	$100	$100	$100	$100	$100	$100
Accrued wages	20	20	20	20	20	20	20
Accrued Federal income taxes	...	40	80	120	160	160	160
Total current liabilities	$120	$160	$200	$240	$280	$280	$280
Net worth	500	500	500	500	500	500	500
Total	$620	$660	$700	$740	$780	$780	$780

without profit or loss had a balance sheet on January 1, as shown in column 1. From this date, sales, expenses, and operating profit are the same each quarter. It is assumed that the corporation must pay a total of 40 per cent in income taxes. Thus the net profit for each quarter is $60, which is paid out concurrently as a dividend. (In actual practice profits would normally not be paid out until a following period. The assumption of concurrent payment is made to simplify the illustration.) The 40 per cent of the $100 operating profit which is the government's share, however, does not have to be paid to the government immediately. (Present Federal tax laws provide that a corporation whose fiscal year ends on December 31 must file a return by March 15 and that the tax due may be paid either in total at the time of filing the return, or in quarterly installments, with the first installment due no later than March 15.[3]) It is retained in the business, with the result that the balance sheet on March 31, column 2, shows an increase in cash of $40 and an increase of the current liability item, Reserve for Federal Income Taxes, of $40.

Operations of the second quarter are like the first: operating profit is $100, of which $60 belongs to the owners and $40 to the government. The owners take their share out in dividends, but the government's share does not have to be paid as yet. At the end of the second quarter the balance sheet shows a further increase of $40 of cash and accrued Federal income taxes. The government at this point has a short-term claim for $80.

The third and fourth quarters are similar in effect. A profit and loss statement for the full year would show operating profit of $400, net profit of $240, and Federal income taxes of $160 none of which has been paid. At this point some might say the government has in effect lent $160 to the corporation, which is evidenced by the current liability of $160 Accrued Federal income taxes. Speaking more precisely, the government allows its share of the net profits to remain in the business during the year in which it is being earned and then permits the business corporation to pay it in quarterly installments during the ensuing year. Unlike the share of the earnings belonging to the stockholders, it cannot be retained except for this brief period. Uncle Sam and the several states want their share paid 100 per cent in cash dividends, and quickly.

On the basis of the first year's result the corporation files a Federal income tax return on March 15 of the following year showing a total tax due of $160, and a check accompanies the return for $40 for the first

[3] At the time of this writing the tax law provided for an annual increase in 5 per cent jumps in the proportion of the tax liability to be paid on Mar. 15 and June 15 and a corresponding decrease in the last two quarters. By 1955, corporations will be paying all the previous year's tax accruals by June 15 of the following year. This change in the tax law does not invalidate the principle here illustrated.

quarterly installment. The effect of this transaction is to reduce cash by $40 and Federal income tax liability by $40, but during the first quarter of the second year profits are assumed to continue at the same rate, and the corporation accrues a new tax liability at the same rate it pays off the old. The balance sheet at the end of the first quarter (column 6) would thus remain unchanged from December 31. And as long as the profits and tax rate remain unchanged, the corporation will have the use of $160 which it has earned for the government. The reader will note that under the 40 per cent tax rate assumed, the corporation has been working for almost 5 of the 12 months for the government and only 7 for the stockholders. The latter will, of course, pay additional personal income taxes on any dividends they receive.

For simplicity of illustration the increase in assets from profits was shown as an addition to cash. However, if the corporation did not need to maintain such a large cash balance, it could have used this increase in funds to build up inventories or to increase its investment in accounts receivable.

This source of funds is not ostensibly available to proprietorships and partnerships, because, as discussed in Chapter 2, profits of these forms of organization are treated as personal income and so no tax liability appears in the business balance sheet. Furthermore, the present tax laws provide for the payment of the personal income tax on a pay-as-you-earn basis. The individual must estimate his income a year in advance and on this estimate approximate the personal income taxes that he will have to pay. This estimated tax must then be paid quarterly during the year in which the income on which it is based is being earned. However, in the case of business owners there is nothing to prevent a substantial underestimate of the liability during the year provided a correction is made by amending the return and paying the amount of the understatement by January 15 of the ensuing year. Since the matter is one of personal liability of the owners of the unincorporated business, neither the amount of the accrued and unpaid liability of the owners because of business profits nor the potential drain on cash by owners in need of withdrawals to make up any deficiencies in their pay-as-you-earn payments can be had from the balance sheet.

The potential drain on the cash of unincorporated enterprises for the income taxes of owners should be kept in mind in interpreting their current position from the balance sheet.

Because short-term credit is generally easier to obtain, as pointed out above, it may be that it is the only type of credit available. A firm with mediocre or poor credit may be unable to secure long-term funds of any kind, either ownership or creditor funds. However, unless it is on the

brink of insolvency, it is likely that it can obtain some trade credit from sellers anxious to increase their sales. The possibilities of this and other forms of short-term credits are more fully treated in later chapters.

2. *Cost.* Short-term financing in many cases may be obtained at lower cost than long-term financing. By cost is meant the interest cost plus any service charges or other costs on an annual basis paid by the borrower in connection with the credit. The subject of these costs is treated more fully in connection with the later discussion of the various types of credit. All that will be done here is to point out the main factors that affect the cost of a particular loan and to show how these factors operate in some cases to make short-term loans cheaper than those of longer maturity.

The cost of funds to any business is influenced by the level of the "pure" interest rate, the risk of loss of principal involved, the cost of making, supervising, and collecting the loan, and the size of the loan.

a. The pure interest rate is the riskless interest rate—the rate that would result from the interaction of the demand and supply of funds if there were no expectation of loss present. The closest approach to the pure interest rate in this country is that on United States government securities.

b. "Risk" refers to the risk of loss from the inability of the debtor to pay at maturity. The higher the creditor believes this risk to be, the higher will be his charge for a loan. If he believes the risk is too high, he refuses to grant the loan. Mention has already been made of the increase in risk with the increase in the length of the loan because of the greater chance of unforeseen circumstances changing the credit position of the borrower. Therefore, if all other factors are the same, the shorter the loan, the less the risk, and cost will be correspondingly lower.

c. The expenses involved in making loans vary considerably. They are, however, generally related to the risk factor. In all loans there is some cost to the creditor in making the analysis of the prospective debtor's ability to repay. This may be quite small, as in the case of a manufacturer whose credit man spends five minutes in looking up the credit rating of a customer in a credit manual, such as Dun and Bradstreet, at least for well-rated buyers, or it can be quite large as in the case of a bank or insurance company which may have several men engaged for a considerable period investigating the background and present standing of a corporation that has applied for a multimillion-dollar loan. If the loan is secured, there are costs incident to watching and caring for the collateral. The point to be made here is that the debtor in the end pays for all the costs incurred by the lender even though they may be buried in the interest rate charged. Such expenses involved in making the loan will have considerable bearing on the cost of money. We shall also see later to what degree expenses for the study and subsequent supervision of credit may be the alternative

to risk of loss. Such high expenses reduce an apparently high return to a creditor to a more ordinary net rate of return.

d. The size of the loan is closely related to item *c,* expense to the creditor, and might for some purposes be considered under that heading. Risk remaining the same, the larger the loan, the lower will be the cost expressed in percentage form. The expenses incurred by the creditor do not vary proportionately with the amount lent. Many are relatively fixed. As the size of the loan increases, the expenses per dollar of loan tend to decrease. The actual *dollar* cost increases somewhat, but by spreading the expenses over a larger sum the creditor can afford to reduce the interest *rate* charged. This differential factor is most apparent in the case of loans for less than $1,000. Some kinds of lenders prefer not to make loans for less than a certain amount.

In reviewing all the factors bearing upon relative cost, it may be said that short-term financing enjoys a cost advantage over long-term financing so far as lower risk resulting from shorter maturity is concerned. The other factors, however, may outweigh this one, and so many short-term loans pay a higher rate than long-term loans. On the other hand, short-term credits may be the only form available; long-term credits to small-sized impermanent business units might represent too high a risk to be practicable. The later discussion of trade credit, receivables, and inventory financing will elaborate on this point.

Several sources of short-term credit, however, involve no cost to the business. These have already been taken up above. They include such items as amounts owing to employees (accrued wages), to the United States government and some state governments (accrued income taxes), and under some conditions to trade creditors (accounts payable). The question of when and whether trade credit is without cost to the debtor is analyzed in the following chapter. The extent to which "free" short-term credit is available depends on the payroll practices of the business, the credit terms of the trade, and for corporations the amount of taxable net income, the conditions under which it is taxed, and the lag between earning and the payment of the tax.[4]

Long-term funds are rarely costless in the same sense. If a business borrows for periods over a year, it must pay interest, and if it wishes to sell stock, there must be an expectation in the mind of the investor of a rate

[4] That tax accruals (or retained earnings that belong to the government) can be at times an important source of credit is evident from an analysis of the Dec. 31, 1944, balance sheet of Charles Pfizer & Company, Inc., a manufacturer of chemicals and pharmaceuticals. They supplied 7.2 million dollars of a total of 23.9 million of funds being used by the business. In other words, the Federal government had a claim equivalent to 30 per cent of the total assets. This was not an unusual situation

of earnings in line with that of other firms with similar risks. It is true that once proprietor, partner, or stockholder funds have been invested in the business, there is no legal compulsion to pay any return on them. These individuals are the owners. The absence of any stipulated rate of return for ownership funds does not mean they are costless. The cost is merely more difficult to measure because it is a matter of profit expectations. For an owner enthusiastic over the profit prospects he may be expected to surrender to obtain coowners who will help finance his business, the cost may seem painfully high. This explains one of the preferences which many small businessmen have for borrowed funds. Prospective investors, on the other hand, tend to feel much more strongly about the risks of supplying ownership funds to such concerns and more doubtful of the potential profits.

3. *Flexibility.* Short-term financing is more flexible than long-term financing. "Flexibility" as used here refers to the ability of the business to secure funds as they are needed and repay them as soon as the need vanishes. Most enterprises have a constantly varying amount of total assets, which means a constantly varying need for funds, represented by the total liabilities and net worth. These fluctuations in total assets are irregular and of varying duration. The funds necessary to meet daily, weekly, monthly, or seasonal variations can usually be most advantageously supplied by short-term credit. Short-term funds, as pointed out in (1) above can be secured with comparative ease, and if the need for the funds as represented by the total assets diminishes, the cash recovered from the conversion of the unneeded assets can be used to retire the short-term debt.

Long-term financing is not as flexible. It would be inconvenient if not impossible to pay off or retire long-term loans and ownership interest in small sums with every downward fluctuation of asset needs. The only other alternative would be to secure a large enough long-term loan or obtain enough ownership funds at one time to take care of the maximum asset needs for sometime in the future. Consequently, a part of the funds from such a source would be idle for some part of the time. The ability to expand and contract short-term credit as needed is advantageous from the cost standpoint. The costs of long-term funds go on whether the funds are used or not. Costs of short-term financing are incurred only

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during the war years. It resulted from a combination of high level of operations plus high excess profits tax rates. During 1944, income taxes levied on the Pfizer company were 64 per cent of its operating profit. The tax "credit" factor was thus extremely important for concerns doing a hugely expanded volume of business in support of the war effort, which called for additional inventory and receivables, often for government account.

when the funds are in use. When they are not in use, the short-term credits are repaid.

The Place of Short-term Financing in the "Trading on Equity" Concept

One of the advantages of the use of creditors' funds in the business is that is permits the owners to trade on equity; it permits them to enlarge the scope of operations with the hope of gaining larger profits without themselves investing any more in the business. The short-term credits bear a limited (or no) interest cost and therefore tend to accentuate the fluctuations in the rate of return earned on the ownership interest. However, any formal statistical calculations of the amount or extent of trading on equity are generally limited to those situations where long-term fixed income funds are used by the business.

The reasons for excluding short-term financing from the formal calculation of trading on equity results are threefold. (1) The use of short-term funds often shows great variation between balance-sheet dates. It is common practice for a business to select a fiscal year ending that will coincide with the low point of the year for current liabilities in order that the balance sheet will show a high current and quick ratio. Long-term financing because of its very nature does not ordinarily change much between balance-sheet dates. The use of a single year-end balance sheet in determining the amount of trading on equity is therefore much more reliable for the latter than for the former. The average amount of short-term credit employed during the year is ordinarily unobtainable except by the management of the business. (2) The exact payment for the use of short-term funds is not always known. This is especially true of trade credit. (3) Large businesses typically use little formal current credit. Most current debt consists of accruals and invoices awaiting checking within the "cash" period, as discussed later. Its exclusion in the calculation of trading on equity in such cases would therefore make little difference in the result. The businessman, however, especially when he is hard-pressed for funds to expand operations, is acutely conscious of the possible value of additional short-term credit. Aware of the small addition to variable costs which additional sales volume may make, he is appreciative of the virtues of credit that will make such business possible. He thinks in terms of marginal credit costs as against the possible marginal profits. When in need he is apt to think more of credit availability than credit cost.

Disadvantages of Short-term Financing

Frequent Maturities. The greatest hazard of short-term liabilities is the frequent maturity of principal. Debts must be paid at maturity, or the

business can be closed by the creditors. Recurrent payment of principal is not a major problem of long-term financing. It is no problem at all in the case of ownership funds because they have no maturity, and for long-term borrowing, it is a problem only when the loan nears its maturity date or for the fraction that is repaid in the interim.

The most readily apparent or immediate cause of most business failures is the inability to meet maturing debt. One or more basic or underlying causes, such as poor management, bad location, a change in consumer buying habits, inadequate sales volume, or credit losses, may be the fundamental trouble that led to the ultimate insolvency, but the immediate condition appears as a lack of cash to meet maturing obligations.

The well-worn expression "He has never had to meet a payroll" is testimony to the feeling of businessmen as to the urgency and common recurrence of the problem of finding enough cash to pay the employees at the end of the week. With the high personal and corporate income taxes in recent years an increasing number of firms have been embarrassed by not having a sufficiently large bank account to meet an income tax installment, all of which merely reemphasizes the great necessity of adequately planning the cash flow to have funds on hand when the debts mature.

High Cost. A second possible disadvantage of short-term financing is that it may be very costly, that is, the rate of interest paid may be high. At first glance this point of high cost may seem to contradict the point of cost listed above as one of the advantages of short-term financing. The actual costs of various methods of current financing are analyzed in the following chapters dealing with the specific types of loans. Under some conditions of credit risk, collateral protection, general economic outlook and size of loan, the rate of interest demanded by lenders may be high. With a change in some or all of these factors the rate charged may be low.

But whatever the actual figure, the question of cost to each firm is a relative matter. In terms of the rate of interest paid the cost may appear high, but if the funds permit the firm to earn at a greater rate, the high cost will be incurred. It would pay a business to borrow $5,000 for two months at 15 per cent per annum interest if the employment of those funds would yield profits in excess of this cost. For two months this charge would be 1/6 of 15 per cent, or 2½ per cent of $5,000, which would amount to $125. If the credit made additional sales of $5,000 possible, such a profit would be quite possible. Likewise a high cost might be willingly incurred if the alternative was a greater loss. Or a business will borrow at a high rate as the price of staying in business at all.

Factors Determining the Amount of Short-term Financing

The "Ideal" Concept—Permanent vs. Temporary Current Assets. As mentioned earlier, total asset needs of a business fluctuate over the year and over the business cycle, the extent of the fluctuation depending on the nature of the business conducted. A cannery or coal business has large seasonal fluctuations, and a heavy machinery manufacturer or building contractor would have large cyclical variations. Within enterprises with seasonal asset fluctuations it is the current assets rather than the fixed assets that show practically all the variation. Inventory will have to be increased just prior to the busy season. As the period of high sales is reached, inventory is converted into receivables and finally receivables into cash. With a diminution in the volume of business, cash tends to rise. It can be used to reduce debt, paid out to the owners, or held idle in the business.

However, even at the lowest ebb of sales during the year there is usually a basic minimum inventory that must be carried to provide satisfactory service for customers. As long as sales are made on credit, no matter how low the volume, some minimum amount of accounts receivable must generally be carried on the books, and there is a minimum amount of cash that should be kept on hand to meet regularly recurring requirements. This minimum of current asset needs can be designated as the "permanent" current assets. This total must be present at all times if the business is to be conducted satisfactorily. Current assets required at any time during the year in excess of this minimum may be called "temporary" current assets. They are present only part of the time.

The fluctuations in current asset needs present to some extent in most business enterprises are the basis for a theory of the proper division of the financing between short- and long-term funds. The preceding section has pointed up the dangers of short-term credit arising out of the early maturity. It would therefore seem appropriate that all of a firm's fixed asset needs and permanent current asset needs be financed with permanent or semipermanent funds supplied by owners or long-term creditors. Since these two categories of assets are permanent so long as the business remains in operation, it would appear undesirable to finance them by current financing. If for any reason short-term creditors who were financing permanent assets would not renew credits at maturity or could not be replaced by new short-term suppliers of funds, the business would probably fail. If these permanent assets were financed entirely by long-term funds, there would be no maturity problem, or an infrequent one, arising therefrom.

The preceding statement of financial need ignores the "permanent" current debt in the form of accruals and accounts in process of payment, which are almost never wholly eliminated. To the extent that permanent current debt is present, it can be used to finance so much of the permanent assets. The amount of such debt, however, in most cases is comparatively small compared with the permanent assets but for the sake of precision should be subtracted from the permanent assets to ascertain the need for "permanent" funds.

The temporary current assets present a different financial problem. One of the advantages of short-term financing over long-term financing was shown to be its flexibility to meet changing needs. By paying for funds only when they are in use savings can be achieved over a more permanent type of financing that cannot be reduced or expanded readily with need. Since temporary current assets as defined above are present in the business less than one year, it would seem logical to finance them by short-term credits. As the need for current assets increases, current liabilities would increase and subsequently, as inventory and receivables were converted into cash and reduced to a lower level, the excess cash could be used to retire current liabilities. By careful planning and arranging of maturities, the excess cash could be utilized promptly to retire short-term credits, thereby holding interest cost at a minimum. This flexibility would not be feasible if the expansion of current assets had been financed with partners' or stockholders' investment or by a mortgage or bond issue.

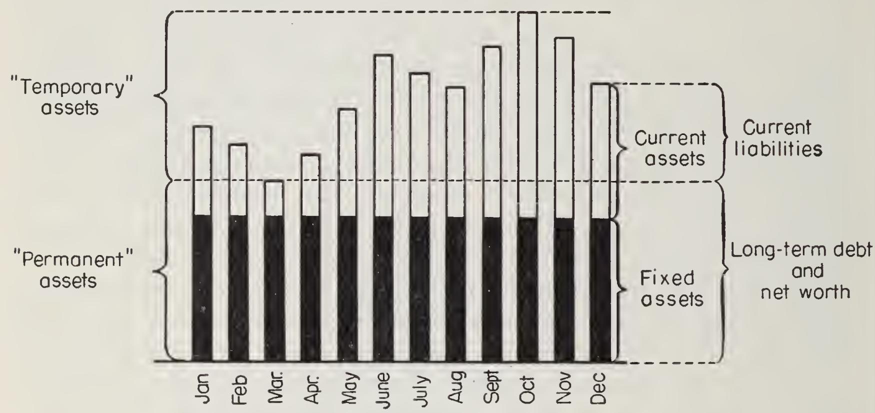
By using short-term financing for temporary current assets and long-term financing for the permanent current and fixed assets, a reasonable compromise is achieved between maximum safety (100 per cent long-term funds) and maximum flexibility (100 per cent short-term funds). This arrangement may be shown graphically as in Exhibit II. An examination of that figure shows current debt would be stretched to the maximum in October and should shrink to zero in March. Since there are almost always some minor current liabilities on the books, such a complete disappearance seems unlikely. The low ratio of current assets to current liabilities in December raises a question as to the practicability of obtaining sufficient short-term credit to finance all the temporary asset needs.

In addition to the seasonal asset fluctuations mentioned above there are numerous other factors at work influencing the asset requirements of a business—cyclical fluctuations, long-term trend of growth or decline, improvements in technology, improvements in means of distribution, changing products, and changes in the price level, to mention some of the chief possibilities. Under the circumstances it would be hard for most business managers to be very precise in determining just what were permanent assets and what were temporary assets over an extended period.

The terms permanent and temporary assets are used here to explain the principle involved. Most businessmen do not think in these terms. They think in terms of balancing the profit potentialities of following a particular course of financing against the risks inherent in that course. They may be content to use short-term credits continuously provided in so doing they can meet all maturing obligations promptly. If it were possible to measure the actual practice of all business as a whole, it might well be found to be moving toward the "ideal" solution suggested above in the case of healthy, reasonably well-run concerns, though such concerns are often diverted as a result of special new factors in developing profit opportunities and in troubles arising out of unforeseen business casualties.

EXHIBIT II

"IDEAL" FINANCING OF ASSET REQUIREMENTS



Probably most small businesses deviate from the ideal on the side of using more current financing than they have temporary current assets. The high rate of failures among small business bears out this conclusion. There is probably a tendency to overstep the safety point in using too much short-term financing in the hope of greater rewards from a larger volume of business, although the explanation may be in the tendency for current debt to get out of hand as a weak business losing money moves in the direction of insolvency.

The prevalent opinion among business owners and managers is that the successful firm is the one that can show increasing sales. There is a constant striving for expansion. Expansion means larger volume of sales; a larger volume of sales requires more inventory and a larger investment in receivables. It should also mean a larger operating cash balance. More assets mean more investment of funds in the business, and under most

circumstances it is easier to obtain short-term than long-term funds. In the case of small firms it is often not a case of which is easiest to obtain; short-term funds may be the *only* funds obtainable save for what the owners are willing to reinvest of their profits.

Another circumstance under which short-term credit is used to finance permanent assets is in the case of firms of the highest credit standing that borrow temporarily from banks or other sources to finance large-scale expansion of fixed assets. Such was the case of many electric public utilities during the late 1940's and early 1950's. Though normally using current financing sparingly because of the nature of their business, bank loans (many running over into the intermediate-term category) were employed because they could be obtained quickly, at low rates of interest, and the use of the financing could be increased gradually as the construction programs progressed. Most of these loans were designed to be refinanced into long-term debt securities or retired by the sale of ownership securities when the total had reached a convenient sum. A long-term or intermediate loan may be retired in whole or in part from retained earnings and funds made available by depreciation allowances.

As against the more numerous firms that finance part of their permanent assets with current funds, there are firms that follow the safer course of financing all or most of their temporary assets with long-term funds. The owners or managers of this class of firms possibly sacrifice some additional profit for greater peace of mind. The more conservative the management, the more likely it is to follow this course. The great depression of the 1930's was instrumental in educating the businessman to the soundness of adequate long-term financing. Many firms went into the depression relying on short-term bank loans which had been renewed time after time by the bank.[5] The ultimate refusal to renew these loans, which many firms had come to look upon as almost permanent financing, was a tremendous shock to the business economy. Many of the firms that were able to survive have tried to avoid a repetition of this mistake.[6] As these businesses expanded from the depression lows, they tended to make use of more permanent funds to finance their asset expansion.

The availability and cost of long-term funds have considerable bearing on the proportion of long- to short-term funds used. Big business has more

[5] Neil H. Jacoby and Raymond J. Saulnier, *Term Lending to Business* (New York, National Bureau of Economic Research, 1942), pp. 16–17.

[6] The commercial banks themselves have moved in the direction of greater conservatism as the result of numerous bank failures in the early 1930's. Loan officers of surviving banks and bank examiners have placed a greater emphasis on liquidity in business loans. The perennially renewed loan is frowned upon. The rise of a new type of intermediate loan providing for a systematic repayment over a short term of years will be discussed later.

ready access to the capital markets. It is easier for large enterprises to sell securities, and thus they have less need for short-term financing. The cheaper the long-term funds, measured by the long-term interest rate or the rate of return demanded by stockholders, the more likely are firms to use long- in preference to short-term funds. When the stock market is at a high level, corporations can sell stock on favorable terms and it is easier to induce new partners to invest in a partnership enterprise.

Sources of Short-term Financing

The analysis of current financing to this point has necessarily involved mentioning some of the sources of short-term financing available to business. This section will give a brief descriptive listing of these and other sources not previously mentioned in order to provide the reader with a panoramic view of the variety of institutions and individuals that are available for supplying short-term funds. The detailed treatment of the types of business that borrow from the different sources and the conditions under which it is done is reserved for the following chapters.

Trade Creditors. Trade creditors in the narrowest sense are manufacturers, wholesalers, or other suppliers of merchandise, materials, or supplies, that is, tangible goods, that are sold to other business establishments on the basis of deferred payment. In a broader sense trade creditors also include those firms rendering services to other concerns. Credit is extended by these firms in an endeavor to increase their sales or because of custom that has been built up over time. Such credit is not a loan of cash but results from a sale of goods or services which does not have to be paid for until some time after the sale takes place. Trade creditors are probably the most important single source of short-term credit whether measured in terms of dollars of credit extended over a period of time, dollars of credit outstanding on a specific date, or number of firms using the credit or extending the credit.

Commercial Banks. The approximately 14,000 commercial banks of the country are the second most important source of short-term funds. The lending of funds to business is one of their primary functions. They are depositories of the cash resources of the community, a part of which is available for loans. Banks lend funds in a variety of ways. Their business loans while generally for a period of under 1 year may run on an installment basis for terms up to 5 or 10 years. They may require security from the borrower or may lend on an unsecured basis.

Finance Companies. Finance companies are specialized financial institutions whose primary reason for existence is to lend money to business.

Excluded from this category are the personal finance companies, which make small loans to individuals, generally for consumption purposes.

Finance companies are a less familiar source of funds to the businessman than are banks. Most of the loans they make are secured, and loans obtained from them are generally of higher cost than bank loans because they tend to specialize in types of financing where the costs of making and administering the loans are high.

Factors. Factors are even less widely used. Factoring may constitute one division of operations of a finance company. Their operations consist in the purchase of the receivables of a business concern. The operation differs from the usual one of the finance company in that it takes over the risk of bad debt losses and each grant of credit to a customer must first pass the scrutiny of the factor.

Customers. Customers sometimes provide short-term funds by making advances on contracts. They, in essence, make a prepayment on goods before receiving delivery. Customers might advance funds in the case of an order so large that it would require a manufacturer to tie up in raw material or goods in process more funds than the seller has ordinarily available to him. The manufacturer (seller) might be unable to borrow from banks or other sources because of poor credit standing or small size or for any other reason. If the goods were unavailable from any other source, the buyer might be willing to advance funds in order to get delivery. During a war period the Federal government may guarantee the borrowing of a supplier of military goods rather than making an actual advance of money.

Often a manufacturer is required to make a down payment when placing an order for a special machine. This deposit helps to protect the machine manufacturer from cancellation of the order after work has begun, as well as serving as a source of current funds.

Commercial Paper Houses. Commercial paper is a term that refers to short-term unsecured promissory notes of business firms. "Open-market" paper is created for round amounts and sold in blocks to a commercial paper house. Commercial paper houses are specialized financial agencies that buy the promissory notes of business establishments and in turn resell the paper to banks or other investors that want a short-term liquid asset. Commercial paper can be used only by medium- and large-sized firms of the highest credit. It is one of the lesser sources of credit in the over-all financial picture.

Personal Loan Companies. These companies were mentioned above as being a consumption credit agency. They are almost wholly that. The maximum size of their loans, usually $300 or $500, is limited by state law.

Occasionally when a small business is hard-pressed for funds, the owner may be able to borrow from one of these companies.

Governmental or Semigovernmental. A number of Federal government agencies and corporations make loans to private business although their total importance is not substantial in the field of business finance. Many of the Federal agencies were given authority to lend to business as an emergency measure during war or depression or to overcome alleged inadequacies in the private lending field. As in other spheres of government, the emergency agencies or their emergency financial powers have tended to persist after the situation calling for their enactment has vanished. Some of the loans are short-term, but most fall in the intermediate- or long-term class. The Federal Reserve banks, which are not strictly a government agency, also have special facilities for lending to business.

Miscellaneous. Small businesses often have recourse to direct cash loans from officers, partners, stockholders, directors, or close friends of the owners. Or the "financing" appears in the balance sheet as salary accruals caused by failure of the owners to withdraw their regular salaries. Because of small size and poor credit rating, advances such as these may be the only source of funds available. A loan from an officer, partner, or stockholder might start out as a short-term loan but, because of the needs of the business and the close personal relationship of the creditor with the business, may in fact become a loan of intermediate- or long-term duration.

Instruments of Short-term Credit

Short-term credit transactions occurring daily are numbered in the millions. A large body of commercial law has been built up on the subject of the rights of the parties in these transactions. Most of these transactions are reduced to writing in one form or another. Through custom and legal enactment, a comparatively few written instruments have come into common usage, some expressed in monetary terms and some in units of goods or rights to goods, for use in credit dealings.

Before embarking on a study of the various types of short-term financing, the reader not already familiar with the subject should be acquainted with the more common documents used in general practice. In some cases their use cuts across institutional lines; in others, particular documents are associated with only one type of financing or institution, and some are used for both short- and long-term financing. For purposes of review the short-term financial instruments can be conveniently divided into two broad classes, evidences of debt and documents of title.

Evidences of Debt

Documents evidencing a debt may in turn be subdivided into two categories, credit instruments which are a written acknowledgment of indebtedness by the debtor, and bookkeeping records of one type or another. Credit instruments take the form of promises to pay (promissory notes) or orders to pay (drafts). The most common example of the other type of evidence of debt in the strictly business field is the open-book account of trade creditors. Similar in character are retailers' records of customer charge accounts.

Many of the documents used in business, both credit instruments and documents of title, have the characteristic of negotiability, which means a quality of transferability or salability which gives to the bona fide holder a better title than he might otherwise have. Most goods are not negotiable in the legal sense. A purchaser of a stolen automobile does not have legal title to the car even though he did not know it was stolen at the time of purchase. The original owner can recover it. On the other hand, the innocent purchaser of a negotiable instrument can enforce that claim against the maker even though the person who gave it to him could not have done so because he was a thief or was subject to some counterclaim, provided the purchaser had no knowledge of any defect in the claim and it was properly signed and endorsed. Money possesses negotiability in the fullest sense. A person wrongfully in possession of money may use it to purchase goods or services, and the recipient will have full legal right to it provided he has acted in good faith.

Strict legal requirements must be met in order to make an instrument (as distinct from a credit document) legally negotiable. Very briefly an instrument to be negotiable must (1) be in writing and signed by the maker or drawer, (2) contain an unconditional promise or order to pay a certain sum of money, (3) be payable on demand or at a fixed or determinable future time, (4) be payable to order or bearer, and (5) name the drawee, if addressed to him, or otherwise indicate him with reasonable certainty.

Title to a negotiable document passes by endorsement and delivery or mere delivery. Negotiability is important to business finance because its presence in many financial documents facilitates the raising of funds. Without it the transfer of goods and services and the financing of production and distribution would be seriously impeded.

Open Book Account. An open book account is merely the creditor's record of a debt resulting from the extension of trade credit entered on the accounting records of the creditor at the time of shipment of goods or rendering of a service. As far as the debtor is concerned, his record of the

debt is the bill or invoice received from the creditor. A copy of a typical invoice is shown on page 326. It contains an itemized list of the goods shipped and their prices, an invoice date (generally the date of shipment), and the credit terms. The accounts payable of a debtor on any day are merely the total of the invoices remaining unpaid.

The creditor's record of trade credit outstanding may be quite informal. Many small firms will keep a duplicate copy of the invoices as their record. In preparing the financial statements the unpaid invoices are totaled to obtain the accounts receivable. A more formal record may be kept in the form of a ledger page for each customer, as shown on page 325. As shipments are made to a particular customer, the total of the invoice is entered in the debit (left-hand) column of the ledger. When payments are received, they are entered in the credit (right-hand) column. The difference between the total of the debit column and the total of the credit column on any date represents the account receivable from the customer for that date. The same type of record can be kept on a machine-posted ledger page.

Promissory Note. A typical unsecured promissory note used by a borrower at a bank is shown on page 353. It provides blanks for the date of the note, the period the note is to run, the amount borrowed, the annual rate of interest to be paid, and the signature of the borrower. A similar form would be used for an unsecured loan from any other institution or individual. Modifications of this form are used where the note is secured. Such a note will usually provide space for a listing of the security pledged and a statement of the manner in which it would be disposed of and applied in the event of any default on the note.

The note may be non-interest-bearing, in which case the income of the lending bank is obtained by purchase at a discount from face value as in the case of open-market commercial paper described below.

Commercial Paper. Open-market commercial paper, shown on page 374, sold through a commercial paper house is always discounted and therefore does not contain a blank for recording the rate of interest to be paid. The creditor (purchaser of the paper) earns a return by purchasing it for less than face value, holding it to maturity, and collecting the face amount. Because the advance of funds in the case of open-market commercial paper is not the result of direct negotiation between borrower and lender as in the case of a bank loan, the name of the creditor does not appear on such notes. It is made payable to the order of the issuer (ourselves) and then endorsed on the back to make it negotiable, just as an individual might write out a check in favor of himself and then endorse it when he arrives at the bank to cash it. The amount borrowed is usually printed on the note because the debtor firm is usually borrowing a large

sum at one time by means of a number of notes of convenient round denomination—$5,000, $10,000, $25,000, or $50,000.

Ordinary Commercial Draft. A draft is defined by the Uniform Negotiable Instruments Act as "An unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time a sum certain in money to order or to bearer." The ordinary commercial draft is not frequently used as a credit instrument. The most common form of drafts (not commercial) are ordinary bank checks. A check is an order to a bank that a certain sum shall be paid to the payee and charged to the depositor's account.

The form of draft shown in Exhibit III could be used either to get a customer to acknowledge indebtedness and agree to pay at a stipulated

EXHIBIT III

ORDINARY COMMERCIAL DRAFT

Customers Draft

CHICAGO, ______________ **No.**

______________________________ **Pay to**

______________________ **or order $** ________

______________________________ **DOLLARS**

____

VALUE RECEIVED AND CHARGE TO ACCOUNT OF

To ______________

____

future date, in which case it could read "thirty days after date," or a collection device when goods were being shipped C.O.D. (collect on delivery). In the latter case, it would read "At sight," and the customer would have to pay the bank presenting same before the goods could be obtained. A time draft becomes a binding negotiable instrument only after its acceptance by the person on whom it is drawn. Acceptance is affected by the drawce writing or stamping "Accepted" on the face of the draft and signing his name below it. The bank at which it is payable and the date of payment will also be added as a rule. A fuller statement of usage is given in the following chapter on "Trade Credit."

Trade Acceptance. The trade acceptance, shown on page 327, is a commercial draft, but it is distinguished from the ordinary form of commercial draft shown above in that it is supposed to be used for only one specific purpose, namely, for trade transactions in place of the open book account.

It is drawn by the seller at the time of sale to cover a specific shipment or transaction and, when accepted, forms acknowledgment of the receipt of the shipment and of the debt incurred by the purchase.

Bank Acceptance. A bank acceptance is drawn on and accepted by a bank instead of a trade debtor. It is used almost exclusively for foreign rather than domestic trade. Foreign purchasers are generally less well known than domestic purchasers, and it is more difficult to get adequate credit information about them. For this reason sellers are generally unwilling to extend trade credit as they would to domestic customers. Because of the superior credit of banks, the seller is willing to ship goods when the customer is able to induce his bank to accept a draft drawn on his behalf. It is then up to the accepting bank to see that the customer supplies the necessary cash before its own liability upon the acceptance comes due. The bank makes a charge for this employment of its credit on behalf of the buyer of the goods.

Documents of Title Used as Security for Short-term Financing

The credit standing of many firms is such that they cannot borrow on an unsecured basis or can borrow only a limited amount in this manner. Businesses may be able to expand their borrowing if they are willing or able to put up security for a loan. Certain assets of the business or its owners may be suitable as security for borrowing. In most cases it is impractical to hand over physical possession of these assets to creditors as security; the creditors have no facilities for storing or caring for them, and the debtors in many cases must retain possession to continue operation. These difficulties are obviated by the use of documents of title. Documents of title, as the name implies, are evidences of title to the business assets. Various types of documents have evolved that will permit the pledging of such of the assets as are suitable security for a loan. The specific use of these documents in actual loan operations is covered in following chapters.

Warehouse Receipt. A warehouse receipt is a receipt issued by a warehouse company on deposit of goods in a public or field warehouse for storage. The receipt, shown on page 393, certifies that a specific quantity of the named and described goods has been deposited in a particular warehouse. Warehouse receipts may be negotiable or nonnegotiable. Both may be used as security for a loan. Title to the former can be transferred by delivery or endorsement, whereas the latter is pledged by assignment.

Bill of Lading. A bill of lading is a written agreement between a common carrier and a shipper in which the carrier, for a consideration, agrees to carry and deliver certain goods to the consignee designated in the

agreement. It acts as a receipt for goods delivered to the carrier, a contract to carry and deliver goods to the consignee, and, if in suitable form, as evidence of title to the goods shipped. In ordinary shipments, the shipper uses a straight bill of lading instructing the carrier to deliver the goods to a person at a named address. If he wishes to retain title, however, he may use an order bill of lading, as illustrated in Exhibit IV, and the

EXHIBIT IV

BILL OF LADING

1 AE 100M 2-48

(Uniform Domestic Order Bill of Lading, adopted by carriers in Official, Southern, Western and Illinois Classification territories, March 15, 1922, as amended August 1, 1930, and June 15, 1941.)

Form 194-3

Shipper's No. 0-7-6-4-X

Agent's No. ______

UNIFORM ORDER BILL OF LADING—ORIGINAL

ILLINOIS CENTRAL

ILLINOIS CENTRAL RAILROAD COMPANY

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading,

At NEW ORLEANS LA AUG 5, 1949 From GULF IMPORTING CO

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained, including the conditions on back hereof, which are hereby agreed to by the shipper and accepted for himself and his assigns.

The surrender of this Original ORDER Bill of Lading properly indorsed shall be required before the delivery of the property. Inspection of property covered by this bill of lading will not be permitted unless provided by law or unless permission is indorsed on this original bill of lading or given in writing by the shipper.

Consigned to ORDER of SOUTHERN COFFEE CO

Destination MARSHALLTOWN State of IOWA County of ______

Notify LYONS & SON GROCERY CO

At MARSHALLTOWN State of IOWA County of ______

Route ICRR SOU FREEPORT CGW

Delivering Carrier C G W Car Initial IC Car No. 33401

No. Pkgs.	DESCRIPTION OF ARTICLES, SPECIAL MARKS, AND EXCEPTIONS	* Weight (Sub. to Correction)	Class or Rate	Check Col.
450	BAGS GREEN COFFEE	58950	70	
		EC	6%	
	EX RIO D J -- SS DELSUD			
	S L & C			
	SEALS -- NOPB 16471 - 72			

Subject to Section 7 of conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

.... (Signature of Consignor.)

If charges are to be prepaid, write or stamp here, "To be Prepaid."

Received $ .... to apply in prepayment of the charges on the property described hereon.

.... Agent or Cashier.

Per .... (The signature here acknowledges only the amount prepaid.)

Charges Advanced: $ ....

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."

NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding .... per ....

GULF IMPORTING CO Shipper. ______ Agent.

Per WEJ Per ______

Permanent postoffice address of shipper ______

carrier will deliver only upon presentation of the bill suitably endorsed by the shipper. The latter transmits the bill through his bank with a collection draft (Exhibit III) which has to be paid to obtain the bill of lading.

Trust Receipt. The trust receipt, shown on page 398, is a title document that lodges legal title with the creditor but allows physical possession to the debtor. As a general rule, the trust receipt provides that the property it covers can be sold, warehoused, or manufactured and sold, the proceeds of the sale being applied to the debt. Where a bank lends on the security

of a trust receipt, the title is with the bank but the possession with the borrower, who agrees to protect the bank's interest.

Chattel Mortgage. A mortgage consists of two parts, a promissory note signed by the borrower and a pledge of property as security for the note. In common everyday usage a mortgage is thought of as applying to real property—land or land and buildings. A chattel mortgage, shown on page 400, however, is a pledge of movable property as distinct from real estate, which is fixed. In all other respects it is very similar to the real-estate mortgage. For a business firm the chattels might be inventory, furniture, trucks, and automobiles. The pledge of property gives the holder of the mortgage first claim against that property in event of default on any terms of the note.

Assignments. Assignment is the act by which a person transfers in writing to another certain property which cannot be transferred through the exercise of the principle of negotiability. Businesses generally have, as assets, claims on others which can be used as security for loans. These claims are not negotiable; so the act of pledging must take the form of an assignment rather than transfer by endorsement or by mere delivery. The commonest of these claims are accounts receivable. A firm may assign all or part of its accounts as security for a loan. Any cash receipts from the assigned accounts belong to the lending financial institution.

A second common type of assignment used, particularly by small establishments, is the assignment of life insurance policies carried by the business on the lives of its officers or sometimes personal policies of the owners. By assigning the policy as collateral to a lender, the lender is given the right to collect the proceeds of the policy in case of death of the insured or maturity of the policy or the cash surrender value of the policy in case of default on the loan.

Stock certificates owned by the business or its officers or owners are a fairly common type of collateral pledged as security for loans. The lender will not advance funds with a stock certificate as security unless a clear legal title can be given by the borrower. This is accomplished by the owner executing a separate assignment form in favor of the lender and delivering it along with the stock certificate and note when the borrowing transaction is consummated. In case of default on the note, the lender need only send the assignment form and stock certificate to the transfer agent to have the certificate transferred to his name. If the note is paid at maturity, the assignment is destroyed and the stock certificate returned to the borrower.

Summary

This chapter has pointed out the nature of short-term financing and its importance to current business operation. Short-term credits are a major source of funds for most businesses, and particularly so for small firms because of the greater difficulty they generally experience in obtaining long-term credit or ownership funds. There are a wide variety of sources from which business enterprises can obtain short-term credits. The following chapters will examine in greater detail the more important institutions from which short-term funds may be obtained, the conditions under which the business can obtain them, and the relative advantages and disadvantages of each type of credit.

Questions

1. In what sense is it safe to say that every business establishment makes use of some short-term credit?
2. What principal reasons can be given for the extensive use of short-term credit by business?
3. What is the meaning of the term temporary current assets? Is this term not redundant?
4. What is the reasoning underlying the ideal concept of short-term financing? Why is it appropriately referred to as a compromise?
5. Referring to this financing arrangement as ideal is questionable since many businesses vary from it somewhat in practice. Explain the reason for these variations and the resulting justification to the use of the term ideal.
6. What are the principal sources of short-term credit? On what major points do they differ?
7. On the basis of the material in this chapter, what tentative list of primary considerations underlying the selection of any financing program can you make at this time?
8. What legal instruments are commonly employed in short-term credit?

Chapter 14. TRADE CREDIT

The analysis of trade credit will be approached primarily from the viewpoint of the debtor, the business that is utilizing the credit; from this viewpoint trade credit is one of a number of alternate sources of funds. After a more thorough definition of the term, attention will be centered on its relative importance as a source of short-term funds. Why is it used? Why is it made available by sellers? What factors determine how much trade credit will be used? How much does it cost? The answers to these questions must be known to have a clear understanding of trade credit as a source of funds. In order to be able to use trade credit to the maximum when that is advantageous, the businessman must be familiar with his creditor's point of view. For that reason, we shall examine what trade creditors regard as important and how they determine the amount and terms of credit extended.

Definition

Trade credit, or, as it is often called, "mercantile credit," is credit extended by sellers to buyers at all levels of the production and distribution process down to the retailer. In this age of specialization, goods pass through many hands before ultimately reaching the consumer. Trade credit may be used to finance the cost of raw materials, merchandise, or business services employed in the various stages of production and distribution.

Two important classes of credit arising in the transfer of goods and services are excluded from the concept of trade credit. The first is consumer credit, which is the credit extended by retailers to the ultimate consumer. It is excluded because it is not a business credit, and investigating the consumer necessitates a different type of credit analysis. The retailer looks for ultimate payment to the individual's wage or salary income, while the trade creditor looks for ultimate payment from his customer's sale of goods, which provides for repaying the credit extended.

The second exclusion is installment sale credit arising from the sale of industrial or commercial equipment by one business to another. This type of credit is similar to trade credit in that it arises out of the transfer of goods between two business concerns. It differs, however, in several ways: the purchaser signs a promissory note or series of notes for the amount of credit extended; these notes are generally paid off in equal

installments running for more than a year; and, in each case, the loan is secured by the equipment sold, whereas trade credit is typically unsecured.

Instruments of Trade Credit

1. *Open book account.* The evidence of the extension of trade credit may be an open book account, a trade acceptance, or a promissory note.[1]

EXHIBIT I

LEDGER PAGE

SHEET NO 1 — ACCOUNT NO 8

RATING K-2 — NAME Rockwell Catch Basin & Sewer Service

CREDIT LIMIT $600 — ADDRESS 111 W. Washington Str

TERMS 2% Tenth Prox. — Tel: FRA 2-0012 — Chicago 2, Ill

FORM N2 D	DATE 1947		ITEMS		FOLIO	DEBITS	CREDITS	BALANCE
	JUL	16	at our yard		2332	2 60		
		17	6620 S. Cottage Grove		2354	100 80		
	AUG	16	at our yard		2796	3 24		
		21	" " "		2845	8 40		
		22	" " "		19318	20 56		
		26	12260 Carondelet Av		2895	1[illegible] 80		
		26	at yard		2901	11 94		
	Sept	20	Cash on acct	R	731		100 00	
	SEP	4	at yard		19800	4 32		
		9	" "		3106	1 44		
	OCT	1	at yard		20920	5 16		
		1	" "		20933	5 16		
		11	" "		21418	9 90		
		13	6620 S. Cottage Grove		21740	20 09		
		15	at yard		21603	6 12		
		17	" "		3720	1 80		
	Dec	17	Cash on account	R	757		100 00	
		31	Cash	R	760		81 53	
	DEC	6	at yard		4323	7 56		
1948 -	Jan	12	Cash & Disc. $.15	R	764		7 56	
	APR	19	at yard		5374	4 32		
		20	12260 Carondelet Av		5388	8 64		
		22	12260 Carondelet Av		5431	23 92		
	May	12	Cash & Disc. $.73	R	795		36 88	

The open book account is the basis for the great bulk of all such credit outstanding. The records used with the open book account method were described in the preceding chapter. The creditor keeps a page for the charges and credits of each of his customers in a ledger similar to that illustrated in Exhibit I.

[1] The trade acceptance and promissory note both bear the signature of the debtor and for purposes of law establish the debt of the signer. The ledger of the creditor in the case of the open book account does not itself establish the debt. If necessary, it can be established by documentary evidence such as correspondence, duplicate copies of the invoice, sales memos, shipping papers, and any evidence of delivery by the carrier.

The debtor's record of the open account is the invoice he receives at the time the goods are shipped. A copy of a typical invoice is shown in Exhibit II. In some cases creditors send their customers monthly statements (similar to those sent to charge-account customers of department stores) listing all outstanding debts.

EXHIBIT II

INVOICE

Wold Air Brush - Chicago

THE WOLD AIR BRUSH MANUFACTURING CO.
2173 North California Avenue
Chicago 47, Illinois, U.S.A.
Telephone AL bany 2-4600

OUR ORDER NUMBER 03308
INVOICE NO. 1789
INVOICE DATE 18 July 49

SHIP TO AND/OR SOLD TO

SOLD TO

DUNCAN VAIL COMPANY
730 SOUTH HILL ST.
LOS ANGELES, CALIFORNIA
D 689

TERMS: NET CASH

CUSTOMER S ORDER NO.	DATE OF ORDER	DATE ORDER RECEIVED	DATE SHIPPED	SHIP VIA
D 689	12 July 49	14 July 49	18 July 49	Truck

QUANTITY ORDERED	QUANTITY SHIPPED	CAT. NO	DESCRIPTION		TOTAL
10			WOLD AIR BRUSHESTYPE "A-2-N #68791 #68713 #68744 #68721 #68780 #68756 #68749 #68786 #68736 #68764	30.00-300.00-40%-180.00	
10			WOLD AIR BRUSHES TYPE "A-1" #62322 #63012 #62318 #62331 #62314 #62336 #62349 #62337 #62306 #62335	26.50-265.00-40%-159.00	
10			WOLD AIR COMPRESSING UNITS WP-20 1/4 h.p. 110 v. A.C. 60 cycle	39.95-399.50-30%-279.65	
5			set P.C-2 Opaque Colors	7.00- 35.00-30%- 24.50	
5			set No. 1 water colors	3.00- 15.00-30%- 10.50	
					653.65

The merchandise listed in this invoice has been produced in accordance with the Fair Labor Standards Act of 1938.

MOORE BUSINESS FORMS, INC. , NIAGARA FALLS, N.Y.

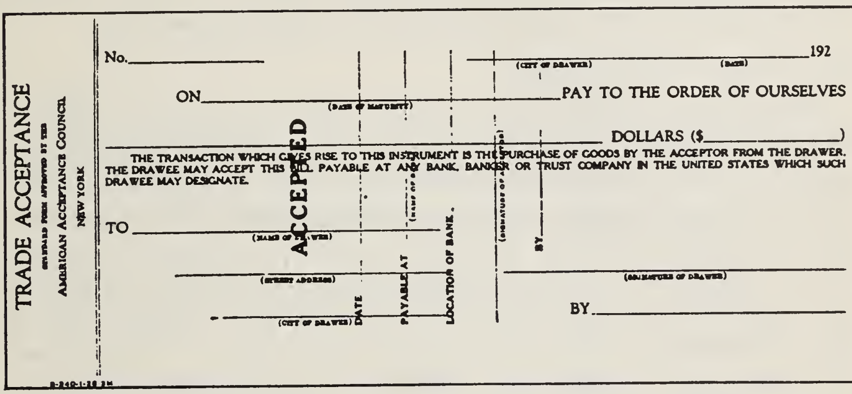
INVOICE

2. *Trade acceptance.* The trade acceptance (Exhibit III) is used in only a few lines of trade. It has considerable merit for the creditor as compared with the open account but little to recommend it from the standpoint of the debtor. It provides the creditor with a written acknowledgment of the debt, whereas he has none with the open-account sale. Because he has put his name to a formal legal document, the debtor is

more likely to feel under pressure to pay it promptly at maturity. Acceptances are presented for collection through banking channels, and so the debtor's bank will know if payment should be refused on a matured obligation. A further advantage to the creditor is that in the trade acceptance he has a negotiable credit instrument. It may be readily discounted at a bank if he needs cash before it matures. With the open-account method of sale, as well, his trade receivables can be converted into cash by pledging them as security for a loan, but generally only after considerably more trouble and generally at a higher cost.

Exhibit III

Trade Acceptances


TRADE ACCEPTANCE

AMERICAN ACCEPTANCE COUNCIL

NEW YORK

No. ______ 192

ON ______ PAY TO THE ORDER OF OURSELVES

DOLLARS ($ ______)

THE TRANSACTION WHICH GIVES RISE TO THIS INSTRUMENT IS THE PURCHASE OF GOODS BY THE ACCEPTOR FROM THE DRAWER. THE DRAWEE MAY ACCEPT THIS BILL PAYABLE AT ANY BANK, BANKER OR TRUST COMPANY IN THE UNITED STATES WHICH SUCH DRAWEE MAY DESIGNATE.

TO ______

BY ______

ACCEPTED

DATE

PAYABLE AT

LOCATION OF BANK

BY

Why then is not the trade acceptance in greater current use? The anwer lies primarily in the force of custom. Once the open-account method was established, customers resisted efforts to change because they liked the convenience and greater informality permitted by the open-book account. They resented the request to sign a paper acknowledging the debt as a questioning of their credit worth. Since it is difficult for one company to make the change, unless the whole trade follows suit, because of the fear of losing business to competitors who continue to sell on open account, there has been no strong move for a change on the part of most sellers. As long as their collection experience is good and as long as the trade acceptance is not essential to the creditor in his own search for adequate funds, the advantages of the trade acceptance are slight.

3. *Promissory note.* Promissory notes (illustrated on page 353) are seldom used in the direct purchase of goods or services for the same reasons that trade acceptances are not used. They have all the advantages to the creditor and disadvantages to the buyer that are present in the trade acceptance.

Some use of notes is made in the jewelry, lumber, and fur trades.[2] Otherwise the promissory note in the trade credit field is used as a collection device. Here it takes the place of an open book account and comes into existence sometime after the book credit has come due. Where a customer cannot pay his bill within the regular credit period, he may be given a further extension of time if he will sign a note. The maturing of a note which he has signed is expected to exert greater compulsion on a debtor to pay than an already long overdue account.

One further distinction should be made between the open book account and acceptances and promissory notes. The first appears on the balance sheet of the debtor as an Account Payable, whereas the last two appear as Notes Payable. And on the balance sheets of creditors they are listed as Accounts Receivable and Notes Receivable, respectively.

Importance of Trade Credit

Without the widespread use of trade credit, it is doubtful that our economy would have reached its present levels of industrial production, national income, and national wealth. Other forms of credit are available to business which might be substituted in part if trade credit were absent, but they would not be so universally available or offered in as large volume. With present lending attitudes and legal restrictions it is unlikely that banks, finance companies, and commercial paper houses could fill the void because of their more stringent requirements. Over 90 per cent of the sales of all manufacturers, wholesalers, processors, and jobbers are made on credit.[3] Recent census data bear out this statement. Table 1 shows the percentage of credit sales to total sales for merchant wholesalers, and manufacturers' sales branches. The percentage of credit sales to total sales for these two groups was 85.5 per cent and 84.5 per cent, respectively. Although manufacturers' sales branches accounted for only a small fraction of manufacturers' total sales in 1948, it is likely that the ratio of credit sales to total sales of all manufacturers was close to the latter figure. In contrast, credit sales of all retail stores in 1949 were only 31 per cent of their total sales.[4]

Considerable variation is found in the proportion of credit sales for the various kinds of business. They ranged from a high of 99.7 per cent for manufacturers' sales branches in the dry goods (clothing) field to

[2] William J. Shultz, *Credit and Collection Management* (New York, Prentice-Hall, Inc., 1947), p. 50.

[3] "Bad Debt Loss Survey," *Credit and Financial Management*, August, 1940, p. 23.

[4] Board of Governors of the Federal Reserve System, *Retail Credit Survey*—1949, June, 1950, p. 1.

a low of 40.9 per cent for wholesalers of automobiles. Not only is there considerable variation between different lines of industry, but if figures were available for individual companies within each field, it would be found that there was even greater variation within many of the fields.

Table 1

Per Cent of Wholesalers' and Manufacturers' Sales Branch Credit Sales to Total Sales, 1948 [a]

Item	Merchant wholesalers	Manufacturers' sales branches (with stocks)
Automobiles	40.9	
Beer	49.3	74.2
Chemicals, industrial	91.5	97.4
Dairy products	74.1	66.6
Drugs (general line)	95.4	
Drugs and drug sundries (specialties)	87.3	99.1
Dry goods (clothing)	95.2	99.7
Electrical appliances	86.2	84.6
Electrical supplies, materials, and equipment	89.0	99.6
Farm supplies	75.4	91.5
Furniture	89.1	98.0
Groceries (general line)	82.3	
Groceries (food specialties)	81.1	84.6
Hardware	93.3	92.5
Iron, steel, and products	88.6	97.9
Jewelry	93.2	82.4
Machinery and equipment, commercial	82.6	83.2
Machinery, industrial	94.0	98.0
Paints	84.6	74.5
Petroleum products	90.0	94.7
Plumbing and heating equipment	91.2	95.0
Service establishment equipment	91.5	99.0
Stationery, office supplies	87.8	98.4
Tires and tubes	81.4	78.4
Tobacco and products	66.5	97.0
Wines and distilled spirits	86.0	99.5
Total [b]	85.5	84.5

[a] For establishments doing credit business.

[b] Includes categories not listed above.

Source: Bureau of Census, *Census of Business: 1948, Vol. IV, Wholesale Trade*, pp. 3.03–3.05.

Many of the factors accounting for these variations will be discussed in a later section of this chapter.

While the data of Table 1 illustrate the importance of credit sales by manufacturers and wholesalers, they do not show the amount of financing extended by them at a particular moment of time. The best readily available measure of the amount of funds obtained through trade credit is the amount of accounts payable found in the combined balance sheets of business concerns. However, even such figures must be read with caution. Some trade credit may appear under the heading of notes payable because of the use of trade acceptances or promissory notes. Moreover, the sum of accounts payable does not include what may be termed "float," that is, amounts for which the invoices are in transit to the customer.

On the other hand, it will be reduced by any amounts for which checks have been drawn and are in transit even though creditors have not received such payments. Ordinarily title to merchandise passes from seller to buyer on delivery or when the seller delivers the goods to a carrier and mails the invoice to the buyer. The seller's accounts receivable increase by the amount of the invoice at this time. However, the buyer may not receive the invoice until one or more days later. He therefore has no notice of shipment, and he does not add the amount of the invoice to his accounts payable until received and may delay entry until the goods have been received and checked. Thus the buyer's accounts payable are understated.

It will be apparent from the following discussion that much of this "statistical" trade credit is *nominal* in character. To the extent that it is offered only for a period long enough for the goods to be shipped and checked by the purchaser, it is not a source of credit like a bank loan, which permits of carrying larger inventory.

Economics of Trade Credit

Why does trade credit exist? Why is it used by business firms in preference to other types of credit? Why is it supplied by manufacturers and distributors of goods? The primary function of manufacturers is the conversion of raw materials into finished products, and the principal function of wholesalers and jobbers is the sale of goods to retailers and industrial consumers. To them, the extension of trade credit is a subsidiary function. In fact, it will be shown in later chapters that, for many manufacturers and wholesalers, this financing function can be transferred to specialized lending agencies.

Why Does the Debtor Use Trade Credit?

1. *Convenience and informality.* These are probably more important than any other factors. Trade credit is obtained as an incident to purchasing goods. Merchandise or materials are obtained by merely placing an order with a salesman who calls at the office or by calling on the telephone or writing the supplier. Obtaining financing from a financial institution necessitates a special and perhaps substantial effort on the part of the would-be borrower. No formal credit instrument need be signed. This being the case, the debtor does not feel under as much compulsion to pay promptly by maturity. Default on a formal note, if it does not immediately precipitate bankruptcy action on the part of the creditor, gives the business an unfavorable reputation that may follow it for a number of years. Failure to pay a trade debt by the end of the credit period may have little or no similar effect. If the delinquency is only for a few weeks or a month and does not occur frequently, the creditor may not even be heard from. Such a delinquency might show up as a "slow payment" on a credit report made by the creditor to any credit-reporting agency and circulated to other suppliers, but if it is a single occurrence, it will be likely to have little effect on the concern's general credit standing in the trade.

2. *Only source available.* Trade credit is the easiest type of outside financing obtainable—easiest in the sense that it may be had when all other avenues of securing funds are closed. There are thousands of small business establishments whose credit is such that they cannot borrow from any standard lending institution. Other concerns that can obtain some short-term funds from banks, finance companies, or others find those institutional resources too limited as compared with trade credit for the amount of credit needed. More trade credit is available to them. The reason lies in the easier credit standards of most trade creditors. They are willing to take a larger risk because their profit margin is more substantial than the bare interest received by a bank for a loan. They also think in terms of what the particular credit sales will add to their earnings after allowing for the cost of the goods and any variable expenses. If the net profit margin and the fixed costs are a substantial per cent of sales, additional sales to be obtained from easier trade credit appear attractive. Under such conditions the seller weighs the contribution to earnings against possible bad-debt losses. Moreover, once trade creditors obtain a new customer by granting credit, they hope to make future sales to him, sales which will bring in additional profit. As the customer becomes established, the risk of credit loss may decline. Most financial institutions, on the other hand, not only normally have a very narrow profit margin

in the interest rate they charge but cannot give weight to the profitability of future repeat business from a borrower in the same way that a manufacturer or wholesaler can. With banks, who act as depositories for the public's funds, their special fiduciary position requires particular caution.

3. *Cheapness.* In some cases trade credit is used because it is cheaper than other sources of funds, or at least appears to be cheaper. In borrowing from a bank or finance company the rate of interest is set out plainly in the note, or the rate of discount is agreed upon in advance. There may also be service charges of one kind or another, or additional costs may be incurred by the business in fulfilling protective requirements imposed by the lender. If, however, the concern is in a line of trade where suppliers have terms of net 30 or 60 days or where there is a substantial period allowed to take the cash discount, such as 2 per cent 30, net 60, a certain period of deferred payment is available which carries no explicit cost. In the first case the debtor obtains funds for 30 or 60 days without paying any more for the goods. In the second case, he has 30 days during which he can pay and enjoy the maximum cash discount. On the surface there appears to be no cost to the debtor, but in fact if the creditor is to continue in business for any length of time, his selling price must cover all his costs, a component of which is the costs of extending credit. However, only when there is a possibility of buying from a supplier who had a lower cash price because he did not have to recover credit costs will the buyer impute any cost to the use of such trade credit even though it may exist as a "hidden cost."

Why Does the Seller Extend Credit?

1. *Increased profit.* The basic reason for the extension of credit to customers is the hope of greater profit. By permitting purchasers to pay at a later date, a company can makes sales to those who cannot afford to pay cash, can increase its sales to those who could buy only a limited quantity for cash, and can more effectively meet competition. With larger sales the seller may be able to reduce his selling price. A reduced profit margin on a larger volume may still mèan greater dollar profits and yet benefit the ultimate consumer. In industries characterized by large fixed costs, the increase in sales resulting from selling on credit may mean substantial reductions in the cost per unit. This may best be illustrated by going outside of the trade credit field for a moment to that of consumer credit. It is doubtful that the automobile industry could have reached the level of 4 to 5 million new passenger car sales a year without the widespread use of installment sales to consumers.[5] If the automobile

[5] The 1951 Retail Credit Survey conducted by the Federal Reserve System shows automobile dealer sales divided 52 per cent credit, 48 per cent cash. It is possible

industry had to rely only on cash sales, volume would be smaller and prices higher than they are today.

2. *Custom.* In most lines of manufacturing and distribution above the retail level, a new company to the field does not have a free choice as to whether or not to sell on credit and as to the terms of credit to extend. If it wishes to make a place for itself in the industry or trade, it will have to conform pretty much to the credit pattern already established. In a line of business where credit is extended to all but the weakest purchasers, it is unlikely that the new firm could attract much business on a strictly cash basis unless it was able to offer large price concessions over its competitors. The new business is not often in a position to do this.

The result is that new firms tend to adopt the credit practices of the industry. And because of the added profit possibilities of credit sales, it is not unlikely that the credit customs "forced" on them result in their long-run advantage. After a concern is well established and has developed regular customers, it may be easier to change credit practices, but even here it is doubtful that the most strongly entrenched firm could make such a drastic change as cutting out credit sales entirely without irreparable harm to its business. Such changes as might be made would be in the length of the credit period and cash discount allowed.

Substitute Credit

Another aspect of the economics of trade credit is the interrelationship of mercantile credit and other forms of business credit. Credit obtained from trade suppliers, as we have seen, is only one of a number of sources of funds for the typical business enterprise. Many factors, as we shall see later in the chapter, bear upon the amount of trade credit used by a particular concern. But one of the paramount considerations is the availability of alternative financing. The choice of one source instead of another may also have repercussions up and down the line of processors, manufacturers, distributors, from the extractor of the basic raw material down to the consumer.

If a retail business, for example, has more than ample equity funds, it will tend to make a nominal use of trade credit. Such a situation would mean that the company could well afford to finance its own investment in

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that the credit proportion was actually higher. Many installment contracts are assigned almost immediately to finance companies and are treated by the automobile dealer as cash sales. Also, a number of consumers obtain cash installment loans from lending institutions in order to pay for a car and turn the cash proceeds over to the automobile dealer. For the dealer this is a cash sale, but for the consumer the purchase is as much on credit as a direct installment purchase from the dealer. *Federal Reserve Bulletin*, June, 1952, p. 645.

inventories and the firm's suppliers thus would not be required to have as large an investment in accounts receivable as would otherwise be the case. It would mean that they in turn could direct a larger portion of their available funds to investing in inventory, thereby minimizing the use of trade credit on their part. This point is well illustrated by the experience of business generally during and immediately following the Second World War. At this time concerns were so flush with cash and short on merchandise that trade credit was subnormal in volume. As more normal supply conditions arose, credit expanded relative to sales. On the other hand, if a firm makes extensive use of trade credit, as is more often the case with small businesses, its suppliers will be forced to maintain a large investment in accounts receivable. They in turn must secure the funds from some source, possibly by using more trade credit themselves, borrowing from banks, or obtaining additional long-term investment.

Thus trade credit as an institution is important as a device for shifting financing. It lifts the burden of raising cash funds directly from the shoulders of the small company using trade credit, notably retailers, to larger companies up the line. Greater efficiency results in the raising and use of funds by this arrangement. Funds are secured more easily and more cheaply when obtained in large quantities by firms of high credit standing, and they then, because of the nature of their operations, can afford to be generous in extending trade credit to their customers—so generous in fact that some suppliers' credit advances take on the nature of an equity investment. Such creditors, motivated by the hope of expanded sales but desirous of minimizing costs, are especially fitted by their position and knowledge of trade conditions to administer such credits economically.

Factors Determining the Amount of Trade Credit Used—from Debtor's Standpoint

Seasonal Fluctuations in Inventory

To the extent that there are seasonal fluctuations in the volume of inventory carried, there is a greater occasion for the use of short-term credit to finance these fluctuations; an increase in temporary current assets will tend to be financed by short-term credit. How much of the increase in inventory will be financed by purchase on credit or by some other type of short-term credit will depend on one or more of the other factors discussed below and on the creditors' willingness to extend credit. But the very fact of this temporary bulge in inventory will cause some expansion of accounts payable because of the lag between shipments and

the receipt and payment of invoices even when the latter are paid promptly.

Type of Business

Since trade credit arises primarily through purchase of merchandise for resale or materials for manufacture, one would expect to find the greatest use of trade credit in retail stores and wholesale establishments, where inventories normally make up the bulk of the assets. In the manufacturing field, those firms, such as clothing manufacturers, whose inventories are large in relation to their total assets would ordinarily make greater use of trade credit than manufacturers whose products received most of their value from the contribution of labor, such as the motion-picture and glass- and clay-products industries. Use of trade credit by garages, doctors, lawyers, clothes cleaners, and other service industries would be very small, consisting almost entirely of the purchase of supplies.

Size

Generally speaking, within a particular industry, the smaller the firm, the greater will be the relative use of trade credit. This point is tied to the fact of the generally poorer credit standing of small concerns as compared with large. Many small firms have such a poor credit standing that they do not have a choice of where to obtain short-term funds; if they are obtainable at all, trade creditors are the only ones who will assume the risk.

Danger to Preservation of Solvency

A self-imposed limitation on the use of trade credit is the voluntary limitation on credit purchases by the businessman himself. He should be better able than any outsider to judge the ability of the business to generate cash to pay off short-term liabilities. He will therefore ordinarily limit his purchases; he will not stock up with goods he cannot sell in the near-term future if he has to rely on the sale of those goods for cash to meet his accounts payable. However, the fact that businessmen are sometimes poor judges of their own capacity to pay is evidenced by the nearly universal experience of firms selling on credit of having some bad debts and by the large number of business insolvencies.

Other factors already discussed in earlier sections bearing upon the use of trade credit from the standpoint of the debtor are those of cost, availability of other forms of financing, and convenience.

Determinants of Amount of Trade Credit Used —from Standpoint of the Creditor

Credit Standing of Debtor and Creditor Motivation

As is true of all lending institutions, the principal factor determining the amount and terms of a loan is the credit standing of the borrower. In the case of the trade creditor there are, however, several associated considerations entering into the credit appraisal that are not present in most other lending transactions, all making for greater leniency in the credit appraisal. These are (1) the profit margin generally present in the sale of goods, (2) the hope of repeat business from the debtor-customer which will bring in further profit, and (3) the freedom to bear risk which comes from the use of the creditor's own funds. It is true that creditors may borrow from banks or in turn utilize trade credit advanced by their suppliers in order to have sufficient funds to carry accounts receivable, but nevertheless the bulk of business funds are supplied by owners. In banks, depositors supply 90 per cent or more of the funds, and in finance companies, the owners are ordinarily the source of less than 50 per cent of all funds utilized.

Problems of Obtaining Credit Information. In the credit appraisal the first step is the gathering of information about the applicant. The trade creditor is faced with several problems that bear on the character of the credit appraisal undertaken. First, most firms even of moderate size have numerous customers, often running into the hundreds or even thousands. For each new customer there must be a credit investigation, and if there are to be repeat sales, a continuing or intermittent inquiry into the credit status of each customer should be maintained. Second, the customers of many firms will be widespread geographically, making it more difficult to obtain information than if the customer were close at hand. Finally, for the vast majority of business establishments, the average size of credit outstanding to each customer is small, making it necessary to keep credit investigation costs low.

Reliance on Secondary Sources for Credit Information. For the three reasons cited above it is difficult and costly to conduct a direct investigation into the status of each customer. Unlike a bank or finance company, manufacturers and wholesalers are not in business to lend money. They cannot afford to hire a large staff of analysts to secure and carefully examine the statements of each credit customer. Whereas the financial institutions lend in units of thousands of dollars, the average credit per customer of a trade creditor may well be under $100. Most commercial bank loans, too, are made to businesses within the immediate vicinity of the bank, which permits close contact with the customer.

Mercantile Agencies and Credit Bureaus. Because of the impracticality of direct investigation, businesses selling on credit may rely a great deal on mercantile agencies and credit bureaus for their credit information. These may be classified as follows:

Mercantile agencies:
- General nationwide—Dun and Bradstreet
- Special-line agencies
  - National Credit Office (textile)
  - Lyon Furniture Mercantile Agency (house furnishings)

Credit bureaus:
- National Association of Credit Men
- Local associations of credit men
- Trade-association credit departments

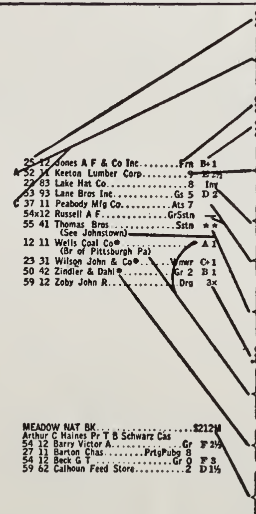
The larger mercantile agencies, which are private business organizations, differ from most credit bureaus, which are usually nonprofit organizations, in the amount and character of the information they supply, which is much more complete and covers a greater variety of data. The smaller mercantile agencies in many cases operate much like the credit bureaus. Dun and Bradstreet and the larger mercantile special-line agencies offer two kinds of service to their customers, a Reference Book and special reports. As an example of these services those of Dun and Bradstreet are described in the following paragraphs. Similar information is made available by the other agencies in their special fields.

The Reference Book, containing the names of approximately 2.8 million business establishments listed alphabetically by state, town, and firm name, is issued six times a year to Dun and Bradstreet subscribers. An example of a Reference Book listing with the various markings used is reproduced as Exhibit IV. Opposite each firm name at the extreme right end of the line are a letter and a number, which are the Dun and Bradstreet credit rating. In front of each name is a four-digit number, which is the Standard Industrial Classification code number indicating the line of business and function.[6] Other symbols, explained in Exhibit IV, give additional information about the business. With the Reference Book the subscriber is furnished a key to the rating classifications (Exhibit V). The letter symbol designates the estimated net worth and ranges from Aa for firms with net worth over 1 million dollars to L for firms with net worth under $1,000. The number symbol designates Dun and Bradstreet's estimate of "general credit standing," ranging from high through good

[6] Each issue of the Reference Book reproduces the Standard Industrial Classification four-digit code. The Standard Industrial Classification of business is a classification of all lines of business activity developed by the Department of Commerce. It has been widely adopted, both in this country and abroad.

Exhibit IV

Dun and Bradstreet Reference Book Listing and Explanation of Markings



Numerical code for business line and function. See Numerical Index starting on page IV.

"A" indicates an additional name and "C" a change in rating since last previous publication of the general Reference Book, of which there are six editions yearly, one every two months. *The "A" and "C" in this position are not to be confused with the "Financial" rating symbols in the table above.*

Line of Business. See abbreviations, page VII.

Ratings in the above table always appear at the extreme right end of the line.

The numeral, preceding the rating, marks the year date to indicate when the business was established or came under present control or management. Thus, 7 means 1947; 5 means 1945. No dates go back of 10 years. Thus the absence of a date marking indicates 10 years or more. *This feature is not used in connection with branch listings.*

Abbreviation for "Investigating." It signifies nothing more than that a pending investigation was incomplete when this book went to press.

"Not Classified" or "Absence of Rating." Indicated in the book by blank space or the long dash (—); in the report by the double hyphen (--) or the long dash (—). See explanation above.

Omission of rating (1) on a branch where headquarters are in the same State or (2) on a secondary name or style where reference is made to another name or style in the same town. The sign (**) is a reminder to look to the other town, or to the other name or style for the rating. It *does not* mean "absence of rating."

Estimated annual sales *only.* See explanation above.

Where the branch and headquarters are in different States, a rating is shown at the branch, but because of different closing dates and possible error subscribers should take into consideration that the branch rating may not correspond with the headquarters rating.

Where a corporate name does not include in its title the words "corporation" or "incorporated" or their abbreviations "corp" or "inc," the ● is used in this position to indicate that the concern is incorporated.

Figures in the rating column following the name of any incorporated bank in the United States indicate approximately in thousands (000 omitted) the combined totals of Capital Stock, Capital Debentures, Surplus and Undivided Profits. On all listed Canadian banks these figures are omitted.

EXHIBIT V

KEY TO DUN AND BRADSTREET REFERENCE BOOK RATINGS

KEY TO RATINGS

ESTIMATED FINANCIAL STRENGTH			COMPOSITE CREDIT APPRAISAL			
			High	Good	Fair	Limited
AA	Over	$1,000,000	A1	1	1½	2
A+	Over	750,000	A1	1	1½	2
A	$500,000 to	750,000	A1	1	1½	2
B+	300,000 to	500,000	1	1½	2	2½
B	200,000 to	300,000	1	1½	2	2½
C+	125,000 to	200,000	1	1½	2	2½
C	75,000 to	125,000	1½	2	2½	3
D+	50,000 to	75,000	1½	2	2½	3
D	35,000 to	50,000	1½	2	2½	3
E	20,000 to	35,000	2	2½	3	3½
F	10,000 to	20,000	2½	3	3½	4
G	5,000 to	10,000	3	3½	4	4½
H	3,000 to	5,000	3	3½	4	4½
J	2,000 to	3,000	3	3½	4	4½
K	1,000 to	2,000	3	3½	4	4½
L	Up to	1,000	3½	4	4½	5

CLASSIFICATION AS TO BOTH
ESTIMATED FINANCIAL STRENGTH AND CREDIT APPRAISAL

FINANCIAL STRENGTH BRACKET		
1	$125,000 to	$1,000,000 and Over
2	20,000 to	125,000
3	2,000 to	20,000
4	Up to	2,000

EXPLANATION

When only the numeral (1, 2, 3, or 4) appears, it is an indication that the estimated financial strength, while not definitely classified, is presumed to be within the range of the ($) figures in the corresponding bracket and that a condition is believed to exist which warrants credit in keeping with that assumption.

NOT CLASSIFIED OR ABSENCE OF RATING

The absence of a rating, whether as to estimated financial strength or as to credit appraisal, and whether expressed by the hyphen (–), the dash (—), or by the (x) sales listing (see below), or by the omission of any symbol, is not to be construed as unfavorable but signifies circumstances difficult to classify within condensed rating symbols and should suggest to the subscriber the advisability of obtaining additional information.

Listings Only as to *Estimated Annual Sales*

When, after investigation has been made, the information obtained regarding concerns listed in the Reference Book is not sufficiently conclusive to permit the assignment of any of the symbols in the above Key to Ratings, in preference to listing these names with no indication of their relative importance, the symbols (1x, 2x, 3x, and 4x) may be used to express, in wide ranges, the stated or estimated annual sales as an index to assist in appraising size. These sales symbols have no other significance; *credit appraisal is neither inferred nor implied.* The sales bracket ranges are as follows:

Estimated Annual Sales Bracket

1x	$500,000 and over annual sales	3x	$10,000–$75,000 annual sales
2x	$75,000–$500,000 annual sales	4x	up to $10,000 annual sales

and fair to limited, and superimposed on the general credit rating are 10 credit *risk* classifications ranging from A1 to 5.

The reports issued by Dun and Bradstreet are available for each of the names listed in the Reference Book and are issued in three forms, synopsis, specialized, and analytical, with an increased amount of information supplied in the order listed. An example of the briefest type of report is illustrated in Exhibit VI. These reports include a brief history of the business, biographies of the owners or chief officers, a description of the method of operation, an analysis of the fire hazard, a simple balance sheet, the record of payments to suppliers, and a summary statement of Dun and Bradstreet's appraisal of the credit risk, including the Reference Book symbols.

The smaller mercantile agencies and the credit bureaus generally restrict the information they make available to what is known as "ledger information," which means data on the debt-paying habits of the firms reported on. The ledger information is only one section of the reports of the mercantile agencies.

Ledger Information. The primary purpose of any credit investigation is to determine as nearly as possible whether or not the firm under consideration will pay its trade creditors at maturity. The detailed analysis of the balance sheet and the inquiry into the history of the business and the business background of the owners and officers are all directed at determining the ability and willingness of the business to pay its debts. If it is impractical to make an intensive investigation into a firm's credit worth for reasons of time or expense, credit men have found that the best single indicator of credit that can be obtained quickly and inexpensively is the recent debt-paying record of the business.

If a firm is now paying its trade suppliers promptly, the assumption is that, except for unusual circumstances, it will continue to do so in the near future. If it is slow in paying its bills, a new supplier can logically assume that payment on his invoices will be late.

1. *Old customers.* The best source of information on this score is that of the creditor's own past record with the customer. It is a comparatively simple matter to check the ledger account or other records kept on old customers when a new order is received to see how they have paid in the past. If the lapse of time between receiving the new order and past shipments is not too great and if the new order is not for an amount that greatly exceeds past shipments, such a check would in most cases be the extent of any credit investigation. In actual practice the person handling the credit end of a business often becomes familiar with the record of regular customers, and there will be no occasion to do any checking on

most orders received from them. When the interval between orders is long or when an extraordinarily large order is received, a further check usually will be made. This may consist in merely drawing a report from a mercantile agency, obtaining trade reports from other suppliers who

EXHIBIT VI

DUN AND BRADSTREET REPORT

Credit - MAN'S CONFIDENCE IN MAN . . . . .

Dun & Bradstreet, Inc.

MERCANTILE CREDIT REPORTS NECESSARILY DIFFER IN FORM AND IN LENGTH, DEPENDING UPON THE SIZE AND COMPLEXITY OF THE CONCERN REPORTED . . . . THE POLICY OF THE AGENCY IS TO PRESENT THE ESSENTIAL INFORMATION AS CONCISELY AS POSSIBLE.

RATING UNCHANGED

CD I MAY 2 1949

RELIABLE PHARMACY
DAVIS, MARTIN, OWNER

NEW ROCHELLE N Y
WESTCHESTER COUNTY
74 PARK AVE

RATING: F 2½

SYNOPSIS

BACKGROUND: A registered pharmacist since 1933, the owner bought this store in 1936.
NET WORTH: $16,165 SALES: $49,000 (1948)
PAYMENTS: Discount-Prompt
CONDITION & TREND: Cash covers debt. Sales increasing and operations profitable.

HISTORY

The style was registered by the owner on May 25, 1936.

Davis was born in Russia in 1909, is married and was graduated from Fordham College, School of Pharmacy, in 1933. He was employed in local stores until he purchased this business in May, 1936 for $8,000, of which $3,500 was cash representing savings and the remainder secured by a chattel mortgage. The mortgage was paid and marked satisfied in May, 1940.

OPERATION-LOCATION

Retails standard-price drugs (15%), sundries (10%), perfumes and cosmetics (25%) and compounds prescriptions (50%). Sells for cash to residents of this section. A few doctors are granted monthly terms. 75% of merchandise requirements are purchased from two jobbers on 2% 10net 30 day terms. A delivery boy and a part-time cosmetician are employed. This attractive store measures 20 x 45 feet in a two-story building in a semi-business and residential district.

FINANCIAL INFORMATION

An estimated statement of May 2 1949:

ASSETS		LIABILITIES	
Cash on hand & in bk	$ 2,300	Accts Pay	$ 650
Accts Rec	100	Accrued items	85
Mdse	11,000		
Total Current	13,400	Total Current	735
Fixts & Equip	3,500	NET WORTH	16,165
Total Assets	16,900	Total	16,900

Sales $49,000 for 1948. Expenses for same period including owner's drawings $11,700. Annual rental $1,750, lease expires 1951. Fire insurance on merchandise and fixtures $15,000.
Signed May 2, 1949 RELIABLE PHARMACY by Martin Davis, Owner

-----0-----

On May 2, 1949 Davis said 1948 sales and earnings were ahead of those for 1947 due mainly to an increase of about 10% in prescription volume and this progressive trend has been carried forward to date. He added that liabilities are confined to current bills. At a local bank balances average in low four figure proportions on a non-borrowing basis.

According to Davis, he and his wife are joint owners of war bonds and other assets not included in the statement.

PAYMENTS

About 75% of purchases are made from two jobbers. The following experiences include the major suppliers.

HC	OWE	P DUE	TERMS	Apr 15 1949	
1450	400		2-10-N30	Disc	Sold from, 1938
700	100		2-10-N30	Disc	Sold years
150	50		2-10-N30	Disc	Sold since, 1942
75			Net 30	Ppt	Sold years
50			Net 30	Ppt	Sold years to 11-48

5-2-49 (369-28)

PLEASE NOTE WHETHER NAME, BUSINESS AND STREET ADDRESS CORRESPOND WITH YOUR INQUIRY
The foregoing report is furnished, at your request, under your Subscription Contract, in STRICT CONFIDENCE, by DUN & BRADSTREET, Inc. as your agents and employees, for your exclusive use as an aid in determining the advisability of granting credit or insurance, and for no other purpose.
9R2-2 (27704)

sell to the customer in large volume, or perhaps going so far as to write or call on the customer for more up-to-date information.

2. *New customers.* For new customers the seller will obtain information on the debt-paying record through a mercantile-agency report, a ledger-information report from a trade association or credit bureau of which it is a member, or direct inquiry to present suppliers of the firm. Sometimes where orders are small, the vendor will trust to the credit rating and net worth shown in a reference book. The ledger report on the experience of other creditors will generally include:

Length of time sold	Amount past due
Date of last sale	Terms of sale
Highest recent credit	Payment record
Amount now owing	

When the ledger experience record shows that the firm has been buying from the same houses for a number of years and has made recent purchases, that there is little or nothing now past due, and that the firm has been discounting or paying its bills promptly, the impression given a new source of supply would be favorable. If, however, most of the reporting creditors had been selling to the firm for only a short time, if the dates of the last sales were some time previous to the date of the ledger report, if there were sums now past due in a number of cases, if many of the terms on which sales were made were C.O.D., or if the payment record indicated slow payments, there would be cause for more careful deliberation and caution in extending credit, if not an actual refusal.

The lack of a long relationship with suppliers might indicate that the firm has had to shift to new sources because old suppliers had refused to extend credit. Lack of recent sales by the reporting creditors would make the report practically worthless because it is the present payment practices that are important. A number of suppliers selling on a C.O.D. basis might indicate that their past credit experience had been so poor that they now refused to grant any more credit. Information on the highest recent credit is valuable because it permits the seller to compare the size of his order with the size of the largest orders placed with other firms. If his order was larger than most of the figures appearing in this column of the report, there might be reason for more caution. It is unusual for a business to place larger orders with new suppliers than old.

Other Sources of Credit Information. While the mercantile agencies and credit bureaus are by far the most commonly used sources of credit information, suppliers will seek information wherever it is to be found. It will pay firms purchasing on credit to bear in mind constantly that their credit standing is determined from a composite of information from a

multitude of sources and anything they can do to affect this information favorably will redound to their ultimate benefit.

1. *Direct interview.* As pointed out earlier, because of the large number of accounts handled credit men do not have much time to devote to any one account. The purchaser of goods will therefore not often have direct contact with the person who passes on his credit except in the very small firm, where this function is only one of several carried on by the owner-manager. Credit men do, however, sometimes make an effort to call on customers located in their immediate vicinity, particularly if the customers are delinquent. Or if the supplier's business is of the type where customers normally visit the plant or showroom to place orders, the customer may find that the credit man will make it a point to meet him on one of these visits.

The impression made by the trade debtor in a direct interview can have considerable bearing on his credit line. The credit man forms a personal judgment of the debtor that will color his subsequent analysis of factual reports and financial statements.

2. *Salesmen.* Many concerns use salesmen for obtaining reports on customers. While the information obtained in this manner is not often financial in character, the salesmen can give the home office a general impression of the manner in which the customer conducts his business. In his placing of orders, is he methodical and does he seem to have records of what he is selling and what his stocks are, or is he haphazard and sloppy in this respect? Is he a good shopkeeper, with neat counters, displays, and "ad" layouts? How good is his location? What is his competition? The answers to these and similar questions will all have a bearing on the credit decision.

3. *Banks.* One of the first inquiries directed to a new credit purchaser will be for the name of his bank. The creditor will then write the bank for as much information on the customer as can be obtained. Banks regard their relationships with depositors as very confidential and are reluctant to pass out very specific information. A bank, however, will generally reveal some information, because it in turn may have occasion to question trade suppliers about the debt-paying record of future loan applicants. Such information will include how long a customer has had a deposit with the bank, possibly the average size of the deposit stated in terms of "a moderate four-figure balance" or "a low three-figure balance," and, particularly important, if the depositor has also been a borrower from the bank, whether the loan was repaid promptly or not. A long record of relations with the same bank is regarded as a good sign. The bank statement or average size of deposit will be checked against cash shown on the customer's balance sheet, and the record of payments

on bank loans will be either in favor of or detrimental to extension of trade credit. If the businessman has issued checks on which the bank had to refuse payment because of insufficient funds or the bank had been obliged to return drafts to creditors drawn to collect overdue accounts, some information or hints of the situation might appear in the bank's report.

Other sources of credit information that are sometimes used are:

4. Attorneys
5. Trade papers and periodicals
6. Investment manuals
7. Litigation lists
8. Individual inquiry agencies
9. Better business bureaus and chambers of commerce

Analysis of Financial Statements. Intensive financial statement analysis along the lines followed by a bank or a finance company is not so universally used in trade credit work because of the circumstances of trade creditors outlined earlier. However, many attempt to get balance-sheet figures either directly from the customer or from a credit agency. The larger the line of credit extended, the more the creditor will insist on making his own analysis of the customer's financial statements. When statement analysis is used (as in initial or periodic reviews of a customer's condition), it is conducted along the lines suggested for all short-term creditors in Chapter 6. The creditor is concerned with the customer's technical solvency—with the ability of the business to generate enough cash to pay the current debts promptly. Trade creditors, in particular, whose customers are retailers will tend to make use of the cash-flow technique to measure availability of the cash to meet accounts payable. It is particularly applicable here because trade credit constitutes substantially all the current liabilities for many small mercantile concerns.

Another difficulty, beyond those already mentioned, in the use of financial statement analysis by trade creditors is the inadequacy of the statements of many small firms. The uncertainties involved in statement analysis were discussed in earlier chapters, but when it comes to the examination of statements kept by numerous proprietorships and partnerships, analysis as ordinarily conducted is of doubtful value. Many small business owners have no knowledge of accounting or the keeping of adequate records and for one reason or another cannot or will not hire the services of a professional accountant. When they are asked to fill out a financial statement form, the entries, if completed, can be little more than rough guesses. Some relevant information may be omitted, or if included it may be classified in such a manner that it is useless for comparative purposes. Or some of the information may be purposely omitted. It is little wonder

that trade creditors place so much reliance on ledger information for small concerns.

The inadequacies of financial statements of small business do not offer the same problem to banks. They are in a stronger bargaining position generally, and if they cannot obtain what they regard as sufficiently reliable financial reports, they refuse to lend. As a consequence would-be borrowers are more cautious in their preparation of data supporting a loan application.

Customs of the Trade

The customs of the trade or industry were discussed above as a determinant of whether or not a concern would sell on credit. Going one step further, the customs of the trade as to credit terms will have a bearing on the amount of trade credit extended at any one time. There tends to be a standardization of terms in most industries. A firm in an industry such as jewelry, where credit terms are ordinarily long (four to six months) would tend to have a larger amount of accounts receivable outstanding in relation to its sales than would a firm in an industry such as cement, where terms are short (10 days).

Availability of Funds to Creditor

The creditor is limited in the amount of credit he can extend by the funds already invested in the business and additional funds that he can obtain. This point of availability of funds is restricted as a real factor somewhat by the competitive practices of the industry. If it is the practice of the industry to sell on credit and on certain terms, the creditor will ordinarily have to have sufficient funds in the business to sell as his competitors do, merely as a condition of staying in business.

Anxiety to Make Sales

Credit may be used as a competitive device or a weapon in sales promotion. More favorable credit terms than those offered by competitors is sometimes used as an inducement to obtain sales. This is more often seen in the retail credit field than in trade credit, but the end result, so far as the amount of credit extended, is the same in both cases. If the price and quality are the same from two suppliers, the one allowing the longer time to pay would tend to get the business.

Credit Terms and Their Meaning

Trade credit terms ordinarily consist of two elements, the length of the period for which the credit is granted and the cash discount offered. The latter may sometimes be absent.

The Credit Period

The length of the credit period differs considerably between industries. Sometimes there is a variation in the length of the credit terms offered by different sellers in the same industry or to different customers of the same concern. Some of the more important reasons for these variations are listed below.

1. *The rate of the buyer's material or merchandise turnover period.* In general the terms tend to conform in a rough manner to the marketing period of the commodity. With this the case, the buyer obtains funds from the sale of the commodity with which to pay the creditor. A shorter credit period would mean that the buyer would have to obtain funds from some other source to help carry the inventory, and longer terms would mean that the creditor would be financing other operations of the buyer in which he has no direct interest. The more customary practice is for the term to be somewhat short of the conversion period so that the buyer has to finance a part of his inventory himself.

2. *Distance of buyer from supplier.* When the distance between buyer and seller is great, the time of the goods in transit is usually large. Sellers often grant longer terms to distant buyers to compensate for time lost in transit.

3. *Credit risk.* Poorer credit risks among buyers may have to accept shorter terms than those standard for the trade. Such terms might be C.O.D., which are ordinarily thought of as including no credit.

4. *Competitive position of seller.* Manufacturers and wholesalers who have an established clientele can enforce more conservative terms than new firms or firms introducing a new product.

5. *Financial condition of seller.* A concern whose working-capital position is weak and whose banking accommodations are uncertain or restricted may be forced to shorten its credit terms and thereby restrict its volume of business. The other alternative is to maintain the regular terms of the industry but cut down its sales by weeding out slow-pay or undesirable credits.

6. *Changes in the business cycle.* In the upward phase of the cycle, demand is good, and sales are easily made. The seller is in a position to dictate terms and futhermore may be compelled by necessity to keep down his investment in accounts receivable in order to finance other aspects of his expanded operations. The downward phase of the cycle offers just the reverse situation. Credit terms may be lengthened because of the desire to keep up sales in the face of slackening demand. And with a smaller volume of business the seller will have more funds available with which to finance accounts receivable.

Classification of Credit Terms

Credit terms may be conveniently divided into six categories.

1. *Prepayment.* Terms of C.B.D. (cash before delivery) are included in this class. They are used when the credit risk is so great that the seller is unwilling to ship the merchandise unless the order is accompanied by cash. No credit is involved with these terms.

2. *C.O.D.* This category includes C.O.D. (cash on delivery) and S.D.–B.L. (sight draft with bill of lading attached). These terms do involve some slight element of credit. Because, outside of the local sales, C.O.D. involves an investment in shipping charges, possibly both ways, C.O.D. is regarded as less strict than C.B.D. This becomes more serious as distance and carriage costs mount.[7] S.D.–B.L. terms are merely a form of C.O.D. terms to be used where the goods are shipped by a common carrier instead of being delivered by the vendor. A sight draft with an order bill of lading attached is sent to a bank in the buyer's city. The sight draft must be paid by the buyer before the bank will give up the order bill of lading, which is needed to get possession of the goods from the carrier. The bank then remits the payment to the seller's bank.

3. *Cash.* Cash terms, contradictory as it seems, usually involve an extension of credit. Such terms ordinarily call for payment within some definite period following date of the invoice, such as 10 days. The reason for this deferred payment is to allow for the transit and inspection of the goods and verification of the invoice. Where the vendor makes truck delivery, as for groceries, "cash" terms may actually mean cash upon delivery.

4. *Ordinary terms.* Most often the terms offered allow a period for the purchaser to dispose of the goods. These terms generally run from the invoice date, and the terms are stated as "net 30" or "net 60" as the case may be. If a cash discount date is also established by the invoice date, the discount per cent and period are included in the statement of the terms. "2/10/60" or "2/10 net 60" means a 2 per cent discount is allowed for payment within 10 days from the invoice date with the full invoice price due within 60 days.

5. *Dating.* The effect of dating is to grant longer credit terms. It usually involves placing a date on the invoice later than the date of shipment and is often used in seasonal businesses, where the manufacturer will allow

[7] Herein lies part of the importance of the bank acceptance for the foreign sale. The seller is not ordinarily willing to ship goods even on C.O.D. terms because of the time involved before the goods are received and the large investment in shipping charges, insurance, and special packing. With a letter of credit from a foreign bank authorizing it to draw drafts against the bank, the seller eliminates the time element in payment and much of the uncertainty of payment.

dating of 60 or 90 days on invoices. In the toy industry, for example, the heavy selling season at retail is in the last three months of the year. By dating, the manufacturers induce the retail and wholesale buyers to place their heavy orders in the spring. This permits the manufacturer to spread his manufacturing over the spring and summer, and as the toys are finished, they are shipped out, but the invoices are dated as of September or October.

Dating may be used as a competitive device or as a device for equalizing the time period for a distant seller so that he may be on an equal footing with a nearby seller.

6. *Lump-order terms.* Terms falling within this group are E.O.M. (end of month), M.O.M. (middle of month), and proximo (following month) terms. All are a form of dating. The effect is to start the net credit period and cash discount period running, not from the date of the invoice, but from the end of the month, middle of the following month, or a specified day in the following month. Terms of 2 per cent/10th proximo, net 30th, on an invoice dated October 12 would permit the buyer to take the discount if payment is made by November 10 with the full amount due November 30.

These terms were originally used in those fields where it was customary to make a number of shipments a month to the same customer. They were a great convenience to the customer because they permitted him to make just one payment per month instead of several as would be the case if he took full advantage of the credit period allowed. Lump-order terms have since been extended to many industries where this method of buying is not in use.

The Cash Discount

As indicated above, the cash discount, the second element in the credit terms, is a discount offered off the invoice price for early payment of the bill. When offered, it is stated as part of the credit terms as illustrated earlier; thus with terms of 2/10/30, the 2/10 refers to the 2 per cent cash discount for payment within 10 days of date of invoice, while the 30 is the net credit period of 30 days.

The cash discount is not to be confused with a trade discount or quantity discount. The cash discount offers a lesser price for early, or "cash," payment, while the trade and quantity discounts have nothing to do with time of payment. A trade discount is merely a way of quoting a net price from an established list price, and it is a way of offering different prices to different classes of buyers such as jobbers and retailers. A quantity discount is a discount from the list or single-unit price for quantity purchases.

The Cost of Trade Credit

Proper knowledge of the costs of trade credit is important to the businessman who is disposed to use trade credit as a source of funds for his business. To him the primary cost element in trade credit is that additional cost he may pay if he does not take the cash discount. It is this cost which is measurable and which can be compared with the cost of funds obtained from other sources. In some cases there may be other costs of credit included in the net cost of the goods, just as the seller's advertising or sales promotion costs are included in the cost of the product, but since these are not easily measured and usually cannot be avoided, they are not as significant to a discussion of the comparative costs of various sources of funds.

Significance of the Cash Discount

When a grocer buys a $100 order of canned goods, he receives an invoice calling for the payment of $100 on terms of 2 per cent 10 days, net 30. He has the option of paying $100 in 30 days, or $98 in 10 days. There is a difference of $2 for 20 days' earlier payment. There are two ways of looking at this $2 discount. The buyer may regard it as a premium for early payment—as an item of profit he can make. If he waits 30 days to pay the bill, he loses this profit and the profit of the seller is accordingly raised by $2. More correctly, the price of the goods should be regarded as $98 and the $2 extra, which must be paid if the bill is not paid until the thirtieth day, as a financing charge, a cost for using the seller's funds for a 20-day period. Two per cent for 20 days is equivalent to an interest cost of 36 per cent on an annual basis (360/20 times 2 per cent = 36 per cent).[8]

From the seller's standpoint the $2 does not represent profit. He has incurred certain costs in undertaking this financing, and whether this $2, or 36 per cent rate, leaves any profit or involves a loss depends on the amount of these costs incurred. They are four in number. First, the seller must obtain from some source the funds which are tied up in accounts receivable. They may be secured from a bank, long-term creditors, or owners, but no matter what the source, some cost will be involved. Second, the credit department must investigate the credit risks of all prospective customers before shipment. Third, not all the debtors who elect not to take the cash discount will pay their bills promptly at the

[8] The actual cost is fractionally higher because the net price after subtracting the discount should be used in the calculation, rather than the gross price. Thus 2/98 = 2.04 per cent for a 20-day period or 36.72 per cent on a 360-day year basis.

end of 30 days; collection expenses will be incurred trying to collect from those who are delinquent. And finally, not all the invoices will be collected; bad-debt losses will occur. If the sum of these four costs is less than the premium charged, sellers make a higher profit on sales to customers utilizing the full credit period, but if it is greater than the premium charged, customers who take the cash discount are paying part of the cost of carrying the poorer credit risks.

When a seller offers a cash discount in his credit terms, this tends to separate his customers in his mind into two classes, those who discount their bills and those who do not discount. It is the customers in the latter class that must be watched carefully. Bad-debt and collection expenses arise from this group. Because of the usual high cost of not taking the cash discount, concerns with an adequate credit standing will ordinarily secure funds from some other source, and only those who cannot borrow elsewhere allow the credit terms to run the limit.[9]

Where sellers do not offer a cash discount in their credit terms there is no cost of trade credit to the purchaser in the sense used above. When the terms are net 10 days or net 30 days, the purchaser has the use of creditor funds for a short period at no cost. The same is true even in those cases where the discount is taken after the lapse of 10 days from the invoice date as in terms of 2 per cent 10 days, net 30. The creditor incurs some small costs as a result of this credit extension, but whether they are recovered by charging a higher price for the goods would depend in large measure on the competitive situation in the industry.

Summary

Trade credit is probably the most important single source of short-term funds, especially for small- and medium-sized businesses; it is used by practically all business establishments in the ordinary course of conducting their business; it outranks all other sources of short-term funds in dollar volume because of its convenience and flexibility and because it is available to concerns with mediocre credit standing—concerns that cannot secure funds from other institutions. It is supplied by most manu-

[9] The approximate interest cost per annum to the buyer of not taking the cash discount under some of the more common terms is:

Terms	*Interest Rate, Per Cent*
1 per cent 10 days net 30	18
2 per cent 10 days net 30	36
2 per cent 10 days net 60	14
3 per cent 10 days net 60	22
2 per cent 30 days net 60	24

facturers and wholesalers because it is a means of increasing sales and profits.

Special sources of credit information, the credit agencies and bureaus, have arisen to help meet the needs of trade creditors in analyzing credit risks. Analysis of financial statements with particular emphasis on the examination of the short-term cash flow is utilized widely where sufficient information is available. Concerns purchasing on credit would be well advised to familiarize themselves with what creditors deem important in making credit decisions. A merchant who desires to serve his own best interests should recognize that his most valuable possession, apart from his actual assets, is a sound and unquestioned reputation as a credit risk and that the most effective way to establish his credit is to meet the standards of his trade creditors.

Although most businesses buy on credit, the full credit period (where a cash discount is offered) is ordinarily utilized by only those firms which cannot secure funds on a more advantageous basis from some other source. Most of the concerns falling within this category are small, and the bulk of them are retail establishments.

Questions

1. What is trade credit? In what forms is it represented? What closely related forms of credit are excluded from its definition?
2. What are some explanations for the widespread use of trade credit?
3. What are some reasonable explanations for the wide variation in its importance by field and type of business?
4. Explain the statement that "Trade credit as an economic institution is important as a device for shifting the 'financing' function among businesses."
5. What are some considerations underlying the extent to which trade credit will be used by a particular business?
6. Develop the reasoning underlying the statement that the comparative cost of trade credit is indeterminate without reference to the discount period.
7. "It is not at all uncommon for the cash discounts taken by some businesses to be equal to one-third and more of the net profit realized." Explain how this could be reasonable.

Chapter 15. COMMERCIAL BANK AND OTHER FORMS OF UNSECURED CREDIT

The major share of short-term financing of business is on the basis of unsecured credit. Trade credit, which accounts for the largest single category of unsecured credit, was the subject of the preceding chapter. A discussion of all other sources of unsecured short-term financing (with the exception of accruals) is included here. Most important of these other sources is the commercial bank. Of less significance is commercial paper, short-term loans (mainly to small businesses) by owners and officers or their relatives or friends, and certain other miscellaneous types of loans.

Banks make both secured and unsecured loans to business. Measured in dollars lent the unsecured loans bulk the largest, but measured by number of loans the secured are most numerous. A survey of business loans of all Federal Reserve member banks in November, 1946, showed the following breakdown: [1]

Type of loan	Amount, per cent	Number, per cent
Unsecured	55.3	35.6
Secured	43.8	61.1
No information	0.9	3.3
Total	100.0	100.0

However, because other financial institutions make secured loans to business firms, in many cases on much the same terms as do commercial banks, a discussion of bank borrowing where some security is involved is reserved for the following chapters on secured credits. Whether secured or unsecured, the decision to use bank credit as an alternative to some other form of credit generally rests on certain relative advantages or disadvantages of bank credit over other sources of funds. Before a businessman can borrow from a bank, he must establish a connection with the bank, usually by opening a deposit account. Furthermore, it is essential

[1] Tynan Smith, "Security Pledged on Member Bank Loans to Business," *Federal Reserve Bulletin,* June, 1947, p. 665.

that he understand the requirements banks impose on borrowers. The procedure for negotiating a loan is much the same whether the credit be secured or unsecured. A discussion of the general business-bank relationships so far as borrowing is concerned, the method of obtaining a bank loan, and the relative advantages and disadvantages of bank borrowing are included in this chapter. The analysis of secured loans in the following chapters, to the extent that they are obtained from banks, will deal only with their differences from unsecured loans.

Bank Loans

Nature of Bank Loans

The application for a loan is the first step in borrowing from a commercial bank. If acted on favorably by the bank, the loan arises when the bank credits the applicant's checking account with the amount of the loan.

Exhibit I

Promissory Note (Unsecured)

No............................ $..........................

Chicago, Illinois,...19.......

....after date, for value received, the undersigned promises to pay to the order of

Harris Trust and Savings Bank

....Dollars,

at the office of said Bank in the City of Chicago, Illinois, with interest at the rate of..........per cent per annum after..................................until paid. Demand, protest and notice of non-payment are hereby waived. In case of the insolvency of the undersigned any indebtedness due from the legal holder hereof to the undersigned may be appropriated and applied hereon at any time, as well before as after the maturity hereof.

Business Address ....

....

FORM B-301

Most bank loans are evidenced by a promissory note (Exhibit I) signed by the borrower and held by the bank until the loan is repaid in full. The note states the amount of the loan, the date of the loan, the rate of interest to be paid by the borrower, and the maturity date of the loan. In addition the note may contain a listing of security if the loan is secured and any other restrictions or obligations placed on the borrower by the bank. The security and restrictions may, on the other hand, be included in a separate document, called a "loan agreement."

Secured loans offer something beyond the general credit standing of the firm to ensure that the bank will be repaid in the event of default. The security may be a pledge of tangible physical assets such as equipment

or plant, a claim to physical property such as a bill of lading or warehouse receipt, securities such as stocks or bonds, or the promise of somebody other than the borrower that he will repay if the borrower does not. A discussion of the circumstances under which a business borrower is required to put up security and the types and methods of handling the assets pledged is reserved for the following chapters.

As indicated above, the promissory note typically states a maturity date. Occasionally, however, the borrower secures funds through what is known as a "demand loan." Instead of listing a specific date by which the loan is to be repaid, the note will specify that the loan is payable on demand, which means that the bank can call the loan at any time. The demand feature creates a possible hazard for the borrower.

The usual short-term bank loan for business purposes is paid off in one lump sum, *e.g.*, if a firm borrowed $5,000 for three months, the entire $5,000 would be paid off at one time at the end of the three-month period. Many banks permit either partial or full repayment prior to maturity at the borrower's option on loans to their own depositors. The borrower, however, may find it useful not to take advantage of this small economy in interest expense but to keep his bank balance high in the later part of the loan period so as to fatten his average balance and create a more favorable standing with the bank as a profitable customer. On the other hand, the borrower may occasionally find it pleases his banker more to prepay his loan as evidence of financial strength.

A few short-term loans are paid off in equal installments, usually monthly, over the term of the loan. These loans are generally what are known as "personal loans" or loans for the purchase of equipment. Since most of the latter have maturities of more than a year, their description and use are left for Chapter 18 on intermediate-term lending. Accounts receivable and certain types of inventory loans to be described in the following chapters are paid off in irregular amounts over the period of the loan.

The Federal Reserve Board survey of bank loans mentioned above showed that at the end of 1946 approximately four-fifths of all loans outstanding to business had an original maturity date of less than one year.[2] This figure is somewhat misleading because it tends to give the impression that business use of bank funds is for shorter periods than is actually the case. Loans are classed as short-term or not on the basis of their *original* maturity. A significant proportion of loans are not paid off at maturity but are renewed one or more times, the borrower paying off the old note in full or in part with the proceeds of a new note. An earlier

[2] *Federal Reserve Bulletin*, May, 1947, p. 498.

survey of member-bank loan practice showed that 41 per cent of the volume of loans made by banks during a one-month period in 1942 were renewals of old loans.[3] A loan classed in bank statistics as a short-term loan may, therefore, so far as the borrowing business is concerned, be a continuous loan of one or more years.[4]

All bank loans fall into one of two categories depending on the time that the borrower pays the interest. Interest may be paid at the maturity of the loan or at regular stated intervals while the loan is outstanding if its duration is more than a few months, or the bank may require the borrower to pay the interest at the beginning of the loan. In the latter case the loan is said to be "discounted." With the same stated rate of interest the borrower always pays a higher effective rate under the discount arrangement. Thus on a \$100 loan for one year at 5 per cent the borrower receives the use of only \$95 for the full time. When interest is paid at maturity, the borrower receives the use of the full \$100 and at the expiration of the note he pays \$105 to the bank. In the first case the effective rate of interest paid is \$5 ÷ \$95, or 5.26 per cent and in the second, \$5 ÷ \$100, or 5.00 per cent. If a borrower discounts non-interest-bearing promissory notes, he must be careful to use a large enough face amount so that the net discounted proceeds will actually be sufficient to meet his need.

Importance

Business firms were owing in excess of 23.5 billon dollars to the commercial banks of the country on June 30, 1951.[5] On the basis of the Federal Reserve member-bank loan survey of November 20, 1946, roughly two-thirds of these loans measured in terms of the amount lent were

[3] *Ibid.*, August, 1942.

[4] An interesting illustration of how loans can be drawn out by renewal is provided by a study of the loan practices of five banks in western Pennsylvania [C. W. McKee, *Maturities, Renewals, and Turnover of Bank Credit in Mahoning and Shenango Valley* (New Wilmington, Pa., American Economic and Business Foundation, 1941)]. At the time of the study the average age of business loans outstanding was 46 months, and the average time each of these loans had been renewed was 9.9 times. Since these figures are averages, a considerable number of these loans must have had a longer age and more renewals.

[5] The exact figure is not available because, in addition to the 23.5 billion dollars of commercial and industrial loans (*Federal Reserve Bulletin*, December, 1951, p. 1548) that were outstanding on that date, there was an unknown amount of business loans secured by real estate which were included under the general category of real-estate loans. In the Federal Reserve bank loan survey of 1946 real-estate-secured loans were 8 per cent in amount and 11 per cent by number of total business loans of member banks.

loans with an original maturity of less than one year, while the balance were term or equipment loans of more than one year.

While there are no recent data available, it was estimated that, in 1939, 17.4 per cent of the current liabilities of nonfinancial business concerns were made up of bank loans.[6] This figures compares with an estimate of 44.0 per cent for trade debt for the same year. It is apparent that although it is not the largest item, short-term bank credit is still a very important source of funds for business. Available data also indicate that bank loans are a more important source of funds for small business than for large business. The lesser use of bank loans by large businesses reflects their greater access to and utilization of long-term investment markets and the reinvestment of earnings.

Relative Advantages and Disadvantages of Bank Loans

As a form of credit, bank loans for a business have all the general advantages and disadvantages of creditor funds as compared with ownership funds cited in Chapter 2. These do not need to be reviewed here except for one point, which may again be emphasized as it pertains to short-term bank loans. This is the relative availability of bank loans for small business as compared with equity funds. With most small business establishments using the proprietorship and partnership forms of organization, they are subject to the disadvantages of impermanence and unlimited liability so far as the availability of long-term debt and equity financing is concerned. To a bank lending for a short period, impermanence is not too serious a factor because the bank is relying on liquidation of current assets now on hand or to be acquired with the loan. Thus for small business firms with a satisfactory credit position, banks are willing to advance relatively large sums compared with the ownership investment. These firms are enabled to transact more business than would otherwise be the case, and, as a result, net worth may grow through retention of the larger profits made possible.

As compared with long-term creditor funds, short-term bank loans enjoy most of the advantages and disadvantages of short-term over long-term creditor funds cited in Chapter 13. They are typically *easier to obtain* and more *flexible*. Under some circumstances the interest cost may be less. Not only might this be true in terms of the rate of interest paid; it particularly applies to the total annual dollar outlay. Short-term bank loans are typically obtained to meet a temporary cash need. Interest is paid for only the duration of the note. Interest cost cumulates on a long-

[6] Neil H. Jacoby and Raymond J. Saulnier, *Business Finance and Banking* (National Bureau of Economic Research, 1947), p. 41.

term note, mortgage, or bond issue, on the other hand, whether the funds borrowed are in use or not.

The principal hazard of short-term bank loans as compared with longer term credits lies in their early maturity. This disadvantage is mitigated in part when it is possible to renew bank loans. However, from the viewpoint of the borrower, his ability to renew his loan may be in inverse proportion to his need for the funds. When the business is progressing satisfactorily and its financial worth seems secure, the bank may have little hesitancy in renewing a loan. On the other hand, when sales fall off and collections slow down, the need for credit is most urgent, but it is at this point that the bank becomes apprehensive about the security of its loan and refuses to renew it.

TABLE 1

PERCENTAGE DISTRIBUTION OF MEMBER-BANK BUSINESS LOANS BY INTEREST RATE, NOVEMBER 20, 1946 [a]

Interest rate, per cent per annum	Amount	Number
0.1–1.9	33.7	1.9
2.0–2.9	21.0	3.4
3.0–3.9	13.8	7.2
4.0–4.9	17.3	21.5
5.0–5.9	8.3	21.6
6.0–6.9	4.8	29.8
7.0–7.9	0.2	2.2
8.0 and over	0.9	12.4
All rates	100.0	100.0

[a] Richard Youngdahl, "The Structure of Interest Rates on Business Loans at Member Banks," *Federal Reserve Bulletin*, July, 1947, p. 804. Each issue of the *Federal Reserve Bulletin* contains a table showing average quarterly and average annual interest rates on bank business loans by size of loans for banks in 17 cities.

In comparing bank credit with trade credit we find that what it may lack in convenience or automaticity is more than offset in some cases by the fact that the loan is received in cash form (a deposit), which can be used for any number of business purposes. Trade credit, on the other hand, arises out of and is used for one specific transaction—the purchase of goods or services. It has also been shown that it is cheaper to use bank credit than to rely upon trade credit beyond the period of the cash discount. In further support of this point interest rates on bank loans in effect in 1946 (Table 1) may be compared with the rate of interest paid for

trade credit under various credit terms shown on page 350. The year was admittedly one of very low interest rates. The statistical dominance of trade credit, however, suggests that on balance its convenience and greater availability outweigh these advantages of bank loans as an alternative method of financing in most cases. A further but immeasurable advantage of bank credit over trade credit is the prestige the business gains. It is an advertisement of the fact that the bank has investigated its credit and found it ample enough to warrant a loan. The generally higher credit standards of banks than most other short-term credit sources adds luster to the standing of the business in the trade when the loan appears in the financial statements.

Preliminaries to Negotiating a Loan

Original Choice of a Bank. An essential for any business enterprise is the establishment of a relationship with a commercial bank. Banks offer a variety of services without which businesses could not function. They serve as a depository for the cash funds and through the facilities of a checking account provide an easy and convenient method for making payments. They act as a collection agent for checks, notes, coupons, and other cash items deposited, furnish safety-deposit facilities for safekeeping valuable papers, and provide improved means of payment through cashier's and certified checks and drafts on correspondent banks in other cities. They are a source of credit information for their customers and at the same time give credit references on their customers to others. Less widely used services, but nevertheless important to those businesses that have need of them, are those of acting as trustee, as with a bond issue, acting as fiscal agent in one capacity or another, and handling foreign trade transactions.

Among the most important of the services rendered is that of making loans. A business in making a bank connection may not, at the moment, be in need of bank credit, but the officers should bear in mind that at some later date a loan may be needed. In selecting a bank it would be well therefore to pick one that will be most favorably disposed toward lending. There are significant differences between banks in this regard. Some are content to invest most of their depositors' funds in U.S. government bonds and lend to only the highest quality risks. Others make an intensive effort to meet the needs of all possible loan applicants with due regard to the safety of their depositors. They look upon loan requests as an opportunity to help the customer and the community and as an opportunity to create an earning asset for the bank, while the former look upon such requests as simply a risk—a chance to lose money—something to be avoided. These attitudes can be ascertained well in advance by

proper inquiry in the community in conjunction with scrutiny of bank balance sheets rather than waiting until a loan is needed and finding out at that time, when it may be too late.

A bank that is familar with the type of business the customer is engaged in is to be preferred over one that is not. Banks that have had experience lending to similar enterprises are in the first place more willing to lend and perhaps will lend more merely because it is a familiar transaction. In addition they are better able to work out loan arrangements that meet the needs of the particular business because they can draw on past experience. In case the borrower runs into difficulty in paying off the loan the bank may be more lenient in its demands or be able to offer worth-while advice on other sources of aid.

In selecting a bank as a possible source for future borrowing the business must also take into consideration the size of the bank as measured by the amount of its capital stock and surplus. Banks are limited by law in the amount they can lend to any one customer, this limit most often being measured in terms of a fraction of these capital accounts. Limitations on state banks vary from state to state. For national banks the limit on unsecured loans to one borrower is 10 per cent of the bank's capital and surplus.[7] Higher limits are provided for loans secured by U.S. government securities, loans secured by shipping documents, warehouse receipts, evidences of title to staple commodities, and loans secured by certain other less frequently used types of collateral. No limit is imposed on a few other categories of secured loans.

For a large number of very small businesses the size of the bank selected will not be important because in these cases the maximum amount they could borrow would be restricted by their own financial worth to a smaller sum than the legal maximum.[8] However, for the moderate- and large-sized firm and for the small firm that has expectations of growing rapidly this may be a factor to consider. Quite apart from any legal limitation, size must be taken into consideration because of the banker's striving for diversification. A bank might refuse to lend as much as 10 per cent of its capital and surplus to one borrower for this reason alone although on the basis of financial statements and other credit information another bank would make a larger loan.

[7] By number national banks account for 35 per cent of all commercial banks, but they hold more than 50 per cent of the dollar amount of all bank loans outstanding.

[8] Even if obtainable, it is unwise for a business borrower to accept a loan up to the legal loan limit of a bank. With good business the company may need more credit. This would mean seeking new banking connections, which might be difficult to obtain. If business is poor, additional funds may be needed. None can be obtained from the bank even though the bank might otherwise be willing to make an additional advance to protect its first loan. A loan from another bank at this time is most difficult to secure.

Another factor that a prospective business borrower should bear in mind in selecting a bank is the opportunity for a close personal relationship with his banker. Ordinarily the better the banker knows his customer, the more likely is he to get a loan. In a small- or medium-sized bank there is a better opportunity for the businessman and the banker to develop a close relationship than in a large bank. Also contributing to the *rapprochement* is the length of time the concern has been a depositor in the bank. Bankers feel under some obligation to take care of old customers, assuming credit standing is sufficiently high, while a relatively new depositor or outsider might receive little consideration if the bank was "loaned up" or if banking authorities were exerting pressure to restrict credit.

A conveniently located bank is generally to be preferred over one at a greater distance. Because of the many services performed for business concerns, ordinarily the closer the bank, the easier it is to transact business. With more frequent contacts between business and bank officers made possible by proximity, the better will be the mutual understanding that contributes to a satisfactory loan negotiation. However, businessses often find it desirable to bank with an institution in a larger and more distant center because of the advantages of more and better services offered and the various restrictions mentioned above on size of borrowing from a nearer but smaller bank, lack of confidence in the safety and management of local institutions, or perhaps too close a tie-up between a competitor and the local bank.

Medium- and large-sized firms often keep balances at two or more banks. The reason may be solely to enlarge their opportunity for obtaining loans should the need arise, or it may be for convenience in obtaining other banking services, or both. Concerns with offices or plants in several locations customarily open accounts with banks in the respective communities. Small firms, however, with limited cash balances would generally find it to their advantage to confine their dealings to one bank. Should the need arise for a loan larger than their bank can handle, the bank may be able to divide the loan with another big city bank with which it has developed a working relation.

A business in its search for bank credit is not necessarily limited to its established banking connection. In some circumstances it will pay the firm to "shop around" to obtain the cheapest and most favorable terms. Its ability to do this, however, depends on a number of factors, internal and external. The higher the credit standing of the business, the more desirable it is as a customer. A firm with mediocre to poor credit, on the other hand, will usually be limited to its present bank for loans, if it can obtain them even there. The size and profitability of the cash balance

that a prospective borrower is willing to lodge in a new bank will also influence the loan decision. Banks make their profit by loaning and investing the funds of their depositors. Profitability of a deposit account from the bank's standpoint depends on the activity of the account as well as its size. The more active it is in terms of turnover and fluctuation of daily balance, the less desirable it is.

External conditions that determine in part the success a business will have in "shopping around" are the state of business activity, general credit conditions, and the condition of the loan portfolio and reserve position of the banks approached. With business activity improving, the monetary authorities encouraging credit expansion by relaxing controls, and a bank having excess reserves and less than its maximum limit of risk assets (chiefly loans), the bank would usually be receptive to an opportunity to lend to deserving new customers. With a reversal of one or more of these conditions the same bank might be found trying to curtail the credit lines it already had outstanding and making new loans only to long-established customers. Where a choice is available, a businessman should give preference to a strong bank likely to be willing and able to extend credit even under adverse business conditions rather than one that has a changeable policy likely to be influenced by its own weakness or vacillation of managerial temperament.

Providing a Foundation for Need. The business borrower can facilitate and increase his chances of obtaining a bank loan by anticipating his need for the funds well in advance. This point was emphasized in Chapter 10 in the discussion of the budget as an aid to financing. By doing some planning in advance he can tell when he will need the credit, and how much. Not only can he go to his bank with an intelligent request, but by doing so he gives the bank more time to make its investigation, which, in turn, enhances the possibility of favorable action by the bank. Bank credit files contain numerous cases of borrowers who after obtaining one loan have come back within a short time with a request for an additional advance or who after obtaining a 90-day loan have had to ask for a renewal because of a lack of care in judging their need. Recurrence of such practice builds up a resentment on the part of loan officers which may have an adverse affect upon a subsequent loan application by a borrower. If renewals are likely to be sought, a prior understanding should be had on the occasion of the original loan.

Equally important in the preliminaries to negotiating a loan is a knowledge by the business borrower of bank requirements. Because of their importance in this respect the usual requirements of banks are discussed in some detail in the following section. By familiarizing himself with the standards set up by his bank as a condition of extending credit the finan-

cial officer in search of a loan for his firm can, first, estimate the possibility of securing a loan from this source, second, improve the business's chances of obtaining it by working toward these standards, and, third, speed action on the loan by having the information available at the time of the application.

A prerequisite to obtaining a loan is an adequate system of records. The importance of records and the financial statements which are constructed from them was emphasized in the section of the book dealing with the analysis of financial statements (Part II). Not only are they essential for the management in order for it to know what it is doing, but when the firm approaches a financial institution for funds, one of the first points the loan officer will want to know is what the present financial picture of the business is. This can be demonstrated only if the business has a clear and accurate system of accounts. A suitable set of records, whether it be simple or complex, is not something that can be put together in a few days when the firm decides it needs a loan. Adequate records, then, not only are a tool of management for control purposes but are needed to provide essential information to a lending bank. Inadequacy reflects adversely upon credit standing.

Usual Requirements of Banks

The usual requirements imposed by a bank on a loan applicant can be discussed in two parts, those having to do with an analysis of the credit standing of the firm, which is the basis for granting or denying the loan, and those imposed on the successful loan applicants after the loan has been granted. For the businessman in search of funds, the former are by far the most important. He nevertheless should be familiar with the latter because they influence his use of the funds, in one way or another, after the loan has been received.

All loan applicants are required to complete a financial statement form similar to that illustrated for a proprietorship or partnership in Exhibit II. A similar form is used for corporations. This form properly completed provides most of the information needed to appraise the financial factors discussed below. The bank will frequently ask for additional facts to supplement or make clear information presented in the application.

Credit Standing. The banker is interested in obtaining all possible information from every source that will bear on the question of whether the firm can and will pay back the loan at maturity. The more facts the banker has before him that suggest the soundness of the loan, the more likely is the loan to be granted. A primary requirement of every applicant is that he disclose all the pertinent facts, good and bad. If detrimental information is held back and the banker finds out about it from another

EXHIBIT II

FORM NO. 2

FORM DESIGNED AND APPROVED BY
BANK MANAGEMENT COMMISSION
AMERICAN BANKERS ASSOCIATION

INDIVIDUAL (MERCHANT OR MANUFACTURER) OR PARTNERSHIP
FINANCIAL STATEMENT
(LONG FORM)

NAME______________________________ ____________ (DATE)

BUSINESS______________________ ADDRESS______________________

TO______________________________ (NAME OF BANK)

FOR THE PURPOSE OF OBTAINING ADVANCES FROM TIME TO TIME ON BILLS, NOTES AND OTHER COMMERCIAL PAPER SIGNED OR ENDORSED BY THE UNDERSIGNED, AND OF OBTAINING CREDIT GENERALLY, THE UNDERSIGNED MAKES THE FOLLOWING STATEMENT OF__________FINANCIAL CONDITION AS OF THE CLOSE OF BUSINESS ON THE______DAY OF______________19___, AND CERTIFIES TO THE ABOVE-NAMED BANK THAT THE INFORMATION HEREINAFTER SET FORTH IS IN ALL RESPECTS TRUE, ACCURATE AND COMPLETE AND CORRECTLY REFLECTS THE FINANCIAL CONDITION OF THE UNDERSIGNED ON THE DATE AFOREMENTIONED.

(FILL ALL BLANKS, WRITING "NO" OR "NONE" WHERE NECESSARY TO COMPLETE INFORMATION.)

ASSETS	LIABILITIES
(SEE SCHEDULE)	NOTES PAYABLE
CASH—ON HAND \$______; IN BANK \$______	TO BANKS
NOTES RECEIVABLE OF CUSTOMERS (SEE SCHEDULE)	FOR MERCHANDISE
ACCOUNTS RECEIVABLE OF CUSTOMERS (SEE SCHEDULE)	FOR MACHINERY, EQUIPMENT, ETC
MERCHANDISE—FINISHED (SEE SCHEDULE)	TO OTHERS FOR BORROWED MONEY
—IN PROCESS	TRADE OR BANK ACCEPTANCES PAYABLE
—RAW	ACCOUNTS PAYABLE—NOT DUE
SECURITIES OWNED (OTHER THAN IN CONTROLLED AND AFFILIATED CONCERNS) (SEE SCHEDULE)	—PAST DUE
OTHER CURRENT ASSETS (ITEMIZE)	DUE TO CONTROLLED AND AFFILIATED CONCERNS
	DUE TO EMPLOYEES (AND PARTNERS)
	DEPOSITS AND ADVANCES OF CUSTOMERS (SEE SCHEDULE)
	RESERVED FOR, AND ACCRUED TAXES
	ACCRUED EXPENSES—WAGES, INTEREST, INSURANCE
TOTAL CURRENT ASSETS	CHATTEL MORTGAGES } DUE WITHIN 1 YEAR
	MORTGAGES OR LONG TERM NOTES } DUE WITHIN 1 YEAR
INVESTMENTS IN CONTROLLED AND AFFILIATED CONCERNS (EXCLUDING LOANS, ADVANCES, ETC.) (SEE SCHEDULE)	OTHER CURRENT LIABILITIES (ITEMIZE)
DUE FROM CONTROLLED AND AFFILIATED CONCERNS (SEE SCHEDULE)	TOTAL CURRENT LIABILITIES
DUE FROM EMPLOYEES (AND PARTNERS)	
LIFE INSURANCE—CASH SURRENDER VALUE (DO NOT DEDUCT LOANS) (SEE SCHEDULE)	CHATTEL MORTGAGES } DUE AFTER 1 YEAR
	MORTGAGES OR LONG TERM NOTES } DUE AFTER 1 YEAR
MORTGAGES OWNED (SEE SCHEDULE)	LOANS ON LIFE INSURANCE
GOODWILL, PATENTS, TRADEMARKS, COPYRIGHTS, DIES, PATTERNS, ETC	OTHER LIABILITIES (ITEMIZE)
LAND—USED IN BUSINESS (SEE SCHEDULE)	
BUILDINGS—USED IN BUSINESS } BEFORE DEPRECIATION RESERVES	TOTAL LIABILITIES
MACHINERY AND EQUIPMENT } BEFORE DEPRECIATION RESERVES	RESERVES FOR DEPRECIATION
FURNITURE AND FIXTURES } BEFORE DEPRECIATION RESERVES	BUILDINGS
TRUCKS, AUTOS, HORSES, WAGONS, ETC. } BEFORE DEPRECIATION RESERVES	MACHINERY AND EQUIPMENT
LAND AND BUILDINGS—NOT USED IN BUSINESS (SEE SCHEDULE)	FURNITURE AND FIXTURES
PREPAID EXPENSES—INTEREST, INSURANCE, ETC.	TRUCKS, AUTOS, ETC.
OTHER ASSETS (ITEMIZE)	RESERVE FOR CONTINGENCIES
	OTHER RESERVES (ITEMIZE)
	TOTAL RESERVES
	NET WORTH (SEE RECONCILIATION)
TOTAL	TOTAL

(BE SURE ALL SCHEDULES ARE FILLED OUT)

EXHIBIT II (*Continued*)

CONTINGENT LIABILITIES			
NOTES RECEIVABLE, TRADE ACCEPTANCES, OR DRAFTS DISCOUNTED OR SOLD			
NOTES RECEIVABLE OR TRADE ACCEPTANCES PLEDGED OR ASSIGNED			
CUSTOMERS' ACCOUNTS DISCOUNTED OR SOLD			
CUSTOMERS' ACCOUNTS ASSIGNED OR PLEDGED			
ACCOMMODATION PAPER, ENDORSEMENTS OR NOTES EXCHANGED WITH OTHERS			
GUARANTOR FOR OTHERS ON NOTES, ACCOUNTS OR CONTRACTS			
MAXIMUM LIABILITY FOR PROPOSED ADDITIONAL INCOME TAXES			
BONDS OR UNFINISHED CONTRACTS			
PURCHASE COMMITMENTS OUTSTANDING (SEE SCHEDULE)			
LITIGATION IN PROCESS OR THREATENED			
OTHER CONTINGENT LIABILITIES			

RECONCILIATION OF NET WORTH						
NET WORTH AT CLOSE OF PREVIOUS FISCAL YEAR						
ADD: NET PROFITS (FROM PROFIT & LOSS STATEMENT)						
OTHER ADDITIONS (ITEMIZE)						
TOTAL ADDITIONS						
LESS: WITHDRAWALS						
OTHER DEDUCTIONS (ITEMIZE)						
TOTAL DEDUCTIONS						
NET WORTH AT END OF PERIOD (SEE BALANCE SHEET)						

STATEMENT OF PROFIT AND LOSS

FOR THE PERIOD BEGINNING ____________ 19____ AND ENDING ____________ 19____

GROSS SALES						
LESS: RETURNS AND ALLOWANCES						
NET SALES						
COST OF GOODS SOLD:						
TOTAL INVENTORIES AT BEGINNING OF PERIOD						
ADD: PURCHASES DURING PERIOD						
FOR MANUFACTURER ONLY: DIRECT LABOR						
FOR MANUFACTURER ONLY: DEPRECIATION						
FOR MANUFACTURER ONLY: OTHER FACTORY OVERHEAD						
TOTAL						
DEDUCT: TOTAL INVENTORIES AT CLOSE OF PERIOD						
GROSS PROFIT						
SELLING EXPENSES						
SALARIES						
COMMISSIONS						
TRAVELING						
ADVERTISING						
TOTAL						
ADMINISTRATIVE AND GENERAL EXPENSES						
PROPRIETOR'S SALARY (OR PARTNERS' SALARIES)						
OTHER SALARIES						
RENT						
NOTES AND ACCOUNTS CHARGED OFF						
DEPRECIATION (NOT APPLICABLE ELSEWHERE)						
TOTAL						

TOTAL SELLING, ADMINISTRATIVE AND GENERAL EXPENSES						
OPERATING PROFIT						
OTHER INCOME						
INVESTMENTS						
CASH DISCOUNTS RECEIVED						
RECOVERIES FROM NOTES AND ACCOUNTS PREVIOUSLY CHARGED OFF						
OTHER						
TOTAL						
OTHER EXPENSES						
INTEREST						
CASH DISCOUNTS GIVEN						
OTHER						
TOTAL						
NET PROFIT OR LOSS BEFORE INCOME TAXES						
ACCRUED FEDERAL INCOME TAXES						
ACCRUED STATE INCOME TAXES						
TOTAL						
NET PROFIT OR LOSS						

WAS AN AUDIT MADE? ____________

NAME OF INDEPENDENT ACCOUNTANTS ____________

BANK ACCOUNTS

NAME AND LOCATION OF BANKS	CASH BALANCE	CREDIT LINES	AMOUNT OF LOANS	ON WHAT BASIS? (ENDORSEMENTS, RECEIVABLES, COLLATERAL, ETC.)
	$	$	$	

LIFE INSURANCE

NAME OF PERSON INSURED	TYPE OF POLICY	FACE AMOUNT OF POLICY	TOTAL CASH SURRENDER VALUE	TOTAL LOANS AGAINST POLICY	TO WHOM POLICY IS ASSIGNED
		$	$	$	

EXHIBIT II (*Continued*)

NOTES AND TRADE ACCEPTANCES RECEIVABLE
—Customers Only (excluding those from affiliates)

NOT DUE			
RENEWED			
PAST DUE AND PROTESTED			
TOTAL NOTES AND TRADE ACCEPTANCES RECEIVABLE			
LESS: RESERVE FOR DOUBTFUL			
NOTES AND TRADE ACCEPTANCES RECEIVABLE—NET			
AMOUNT CONSIDERED OF SLOW COLLECTION			
AMOUNT CONSIDERED OF DOUBTFUL COLLECTION			

ACCOUNTS RECEIVABLE
—Customers Only (excluding those from affiliates)

ACCOUNTS CHARGED WITHIN:			
30 DAYS			
31 TO 60 DAYS			
61 TO 90 DAYS			
3 TO 6 MONTHS			
OVER 6 MONTHS			
TOTAL ACCOUNTS RECEIVABLE			
LESS: RESERVE FOR DOUBTFUL ACCOUNTS			
ACCOUNTS RECEIVABLE—NET			
AMOUNT OF ACCOUNTS CONSIDERED DOUBTFUL			

SELLING TERMS: ______

MERCHANDISE

MERCHANDISE ON HAND			
" CONSIGNED TO OTHERS			
" IN TRANSIT			
TOTAL			
LESS: RESERVES (IF ANY)			
TOTAL AS PER STATEMENT			

1. AMOUNT OF MERCHANDISE PLEDGED ______
2. IS MERCHANDISE CONSIGNED TO YOU INCLUDED IN ASSETS? ______
3. AT WHAT TIME OF YEAR IS INVENTORY HIGHEST? ______ LOWEST? ______
4. AVERAGE AMOUNT OF INVENTORY ______
5. DOES INVENTORY REPRESENT PHYSICAL COUNT? ______ WHEN TAKEN? ______
6. DESCRIBE IN DETAIL THE BASIS OF VALUATION ______
7. STATE THE EXTENT OF ACCOUNTANTS' VERIFICATION, IF ANY ______
8. GIVE DATE (OR DATES) ON WHICH INVENTORY IS TAKEN AND BOOKS ARE CLOSED ______

MORTGAGES OWNED

	FIRST MORTGAGES	SECOND MORTGAGES	THIRD MORTGAGES
HOW MANY OWNED OF EACH KIND			
TOTAL DOLLAR FACE VALUE	$	$	$
AMOUNT OF INTEREST IN ARREARS			

GENERAL DESCRIPTION OF MORTGAGES OWNED. (GENERAL LOCATION OF PROPERTIES MORTGAGED, AND WHETHER THE PROPERTIES ARE FARMS, SMALL RESIDENCES, APARTMENTS, STORES, FACTORIES, ETC.)

REAL ESTATE

	LOCATION AND DESCRIPTION	AGE	CONDITION	COST WITH IMPROVEMENTS	ASSESSED VALUE
1				$	$
2					
3					
4					
5					

	FIRE INSURANCE	ESTIMATED PRESENT VALUE	MORTGAGE AMOUNT	MORTGAGE MATURITY	MORTGAGEE	USED IN BUSINESS?	YEARLY GROSS RENTAL INCOME
1	$	$	$				$
2							
3							
4							
5							

THE LEGAL AND EQUITABLE TITLE TO ALL THE REAL ESTATE LISTED ABOVE IS SOLELY IN { MY / THE PARTNERSHIP'S } NAME, EXCEPT AS FOLLOWS: ______

IF BOOK VALUE (BEFORE DEPRECIATION RESERVES) HAS DECREASED DURING THE YEAR, STATE REASON ______

SECURITIES OWNED

FACE VALUE (BONDS) NUMBER OF SHARES (STOCKS)	PERCENT OF TOTAL ISSUE	DESCRIPTION OF SECURITY	COST	PRESENT BOOK VALUE	MARKET VALUE	INCOME RECEIVED LAST YEAR	TO WHOM PLEDGED
			$	$	$	$	

ARE ALL SECURITIES OWNED REGISTERED IN { YOUR / THE PARTNERSHIP'S } NAME? ______

Exhibit II (*Continued*)

DUE FROM CONTROLLED AND AFFILIATED CONCERNS

NAME OF CONCERN	LOCATION	FOR ADVANCES	WHEN DUE	FOR MERCHANDISE	TERMS
		$			

DEPOSITS AND ADVANCES OF CUSTOMERS

BY WHOM	TIME OR DEMAND	AMOUNT	AMOUNT SECURED BY COLLATERAL
		$	$

COMMITMENTS

STATE OUTSTANDING CONTRACTS FOR CONSTRUCTION OR FOR PURCHASE OF MATERIALS:

LIABILITY INSURANCE (automobile, truck, general public liability, etc.)

NAME AND ADDRESS OF INSURANCE COMPANY	TYPE OF POLICY	AMOUNT OF COVERAGE		EXPIRATION DATE
		PERSONAL INJURY, ETC	PROPERTY DAMAGE	
		$	$	

OTHER INSURANCE

FORM	CARRIED ON	NATURE	ASSIGNEE	AMOUNT
FIRE	MERCHANDISE			$
"	BUILDINGS			
"	MACHINERY AND EQUIPMENT			
"	FURNITURE AND FIXTURES			
"	TRUCKS, AUTOS, WAGONS, ETC.			
CREDIT	ACCOUNTS AND NOTES RECEIVABLE			
USE AND OCCUPANCY				
FIDELITY BONDS				
OTHER				

PARTNERS (indicate special partners, if any)
TO BE FILLED OUT BY PARTNERSHIP ONLY)

NAMES IN FULL	AMOUNT OF CAPITAL CONTRIBUTED	NET WORTH OUTSIDE THIS BUSINESS		ANNUAL COMPENSATION FROM PARTNERSHIP	ADDRESS
		DATE	AMOUNT		
	$		$	$	

IN SUBMITTING THE FOREGOING STATEMENT THE UNDERSIGNED GUARANTEES ITS ACCURACY WITH THE INTENT THAT IT BE RELIED UPON BY THE AFORESAID BANK IN EXTENDING CREDIT TO THE UNDERSIGNED AND WARRANTS THAT ______ HAS NOT KNOWINGLY WITHHELD ANY INFORMATION THAT MIGHT AFFECT ______ CREDIT RISK: AND THE UNDERSIGNED EXPRESSLY AGREES TO NOTIFY IMMEDIATELY SAID BANK IN WRITING OF ANY MATERIAL CHANGE IN ______ FINANCIAL CONDITION WHETHER APPLICATION FOR FURTHER CREDIT IS MADE OR NOT AND IN THE ABSENCE OF SUCH WRITTEN NOTICE IT IS EXPRESSLY AGREED THAT SAID BANK IN GRANTING NEW OR CONTINUING CREDIT MAY RELY ON THIS STATEMENT AS HAVING THE SAME FORCE AND EFFECT AS IF DELIVERED UPON THE DATE ADDITIONAL CREDIT IS REQUESTED OR EXISTING CREDIT EXTENDED OR CONTINUED.

SIGNATURE(S) ______

SIGNED AT ______

THIS ______ DAY OF ______ 19 ______

BMC 142-1-1941

source or at a later date, there is nothing that will give the customer a "blacker eye" in the banker's view. This point was well stated by an outstanding banker, James B. Forgan:[9]

> It is simply absurd for anyone to expect credit unless he affords his banker sufficient information about his affairs to enable him to do his business on an intelligent basis, and no banker is warranted in doing business on any other basis.
>
> The relationship between a banker and his customer should be close, candid, and mutually considerate and helpful. The live, up-to-date businessman takes his banker into his confidence and thus establishes for himself a credit on which he can depend. Only distrust is produced by the reticent, noncommunicative individual who beats around the bush and attempts to bulldoze his banker into doing business with him in the dark.

Any appraisal of credit standing involves the analysis of a number of factors. Traditionally these have been classified as the "C's" of credit—originally three in number, Character, Capacity, and Capital. A fourth, Collateral, was added to cover a situation where a secured loan was involved. More recently the C's have been increased to six by the addition of Conditions (business conditions) and Coverage (insurance). There is danger in the present case of suggesting that the myriad of factors bearing upon credit worthiness can be neatly segregated into a few compact compartments. A more useful classification is one which divides the factors into the three general groups, personal, financial, and economic.[10] A brief discussion of the type of information sought on each of these points follows:

1. *Personal factors.* These, generally considered most important in the credit evaluation, embrace the moral character of the individual, his honesty, integrity, trustworthiness, and morality; and his managerial ability, which includes experience, training, resourcefulness, and adaptability. Character is investigated by marshaling whatever knowledge and experience of the borrower the banker already has, with what can be found out from others. Information is obtained from social and business friends—associates, employees, competitors, customers, and suppliers. An attempt is made to evaluate personal habits such as drinking, gambling, encounters with the law, church and civic activities, etc. Does the would-be borrower engage in questionable practices with customers and suppliers? What is his attitude on the income tax? To minimize this tax is

[9] Quoted in William R. Chapman, "Adequate Credit Files," *Bulletin of the Robert Morris Associates*, July, 1949, p. 50.

[10] This grouping is used in Donald F. Hayne, *Bank Credit for Business* (Madison, Bureau of Business Research and Service, University of Wisconsin, 1949), and is attributed to the Robert Morris Associates, national association of bank credit men.

legitimate, but any evasion of the legal obligation can be hazardous. Does he live up to his promises?

Managerial ability is measured by past business experience and training. Has the businessman been successful in past business ventures? How long has he had experience in the field for which he desires a loan? Is he adaptable to changing business conditions? A business history encompassing only a short span of prosperous years would be discounted. Mortalities in business are highest among new firms, and failures mount in depression. Those which have existed over a period of years generally have a management that has met a variety of conditions and emergencies of one type or another and dealt with them successfully. Is the management resourceful? Has it been able to meet changes in demand with new products as sales of the old declined? Information on these matters is gained from personal references, interviews, and credit agency reports. The financial record of performance when read against the comparative results of similar concerns reflects managerial capacity.

2. *Financial factors.* These factors are ascertained from the financial statements and the budget. Relative profitability reflects the capacity of those who run the business to operate it successfully. Balance sheets reflect such matters as adequacy of capital to support the credit used and sought and willingness of owners to sacrifice their personal spending to reinvest earnings. A budget or plan that shows the intended use of funds and timing of any repayment helps the banker to have a clearer idea of how the borrower proposes to return the money loaned. Supplementary financial information on insurance coverage, on changing costs and market prices, or on other factors that are pertinent makes a favorable impression of businesslike habits that suggest the concern is creditworthy.

The statements aid directly in estimating how much can be lent safely, when it can be paid off, and other conditions of the loan. The analysis of financial statements was covered in Chapters 3 to 7 and need not be reviewed again here.

3. *Economic factors.* Items within this category relate principally to factors outside of the immediate business and its management. A loan made now is going to be paid sometime in the future. What are the prospects for business conditions over the period of the loan, and how are they likely to impinge on this business? Do sales and income fluctuate widely with moderate changes in business activity, or are they little affected? What are credit conditions in general, and how will the bank be affected? Labor conditions within the company itself may be satisfactory, but a strike called by a nationwide labor union, some of whose members work for the applicant, could change the picture overnight. Are there any

special factors affecting the trend of sales of the applicant? Perhaps the concern is manufacturing pianos at a time when the public's favor is turning to other musical instruments or radio and television.

In making the final credit decision the banker must marshal all these factors, personal, financial, and economic. The general economic considerations are seldom controlling. They add a plus or minus factor to the more specific data on the business itself and its officers. If on the basis of the personal and financial factors the loan appears sound, the final question is: What are the chances of the business carrying out its plans with the borrowed funds under the foreseeable economic conditions?

Compensating Balance. Banks usually require borrowing customers to maintain a deposit of 10 to 20 per cent of the amount borrowed. This required deposit is known as a "compensating balance." It gets its name from the fact that it "compensates" the bank for banking services rendered. It may or may not constitute a part of the cost of borrowing from the bank. Only to the extent that more cash is kept on hand in order to obtain bank credit is there a "cost" that can be laid to the bank loan. Ordinary prudence makes some bank balances desirable even though some small businesses lack such cash. They are even willing to pay for the costs of a checking account through service charges rather than try to keep a balance large enough to eliminate those charges.

The imposition of a specific compensating balance percentage is not a hard and fast rule. It varies between banks, between different borrowers at the same bank, and with changes in credit and competitive conditions. With large excess reserves a bank would tend to relax its requirements, while with credit tight and a large demand for loans they would be enforced with greater strictness.

To the extent that the compensating balance requirement forces a borrower to maintain a larger cash balance than he normally would keep, it has the effect of raising the cost of bank credit above the nominal rate. For example, if a business normally keeping a $1,000 bank balance needed an extra $10,000, it would have to borrow $11,250 instead of $10,000 if the bank required a 20 per cent compensating balance. Thus, if the bank charged interest at 5 per cent on the loan, the interest on the $11,250 loan would be $562.50 on the annual basis. Since the business would have the use of only $10,000, the actual rate on the money used would be $562.50 ÷ $10,000, or 5.625 per cent. It is unlikely that this rule would impose any hardship on firms whose finances were in good order. Earlier chapters have pointed out the necessity of maintaining an adequate cash balance. The 10 to 20 per cent compensating balance is therefore unlikely to produce excess liquidity in this regard. This may be illustrated by a hypothetical example.

Before Loan

Cash	$ 15	Accounts payable	$ 25
Receivables	60	Accruals	25
Inventory	75		
Current assets	$150	Current liabilities	$ 50

After Loan

Cash	$ 15	Notes payable (bank)	$ 50
Receivables	60	Accounts payable	25
Inventory	125	Accruals	25
Current assets	$200	Current liabilities	$100

The firm before the loan had a cash balance equal to 10 per cent of current assets. After receiving a bank loan of $50 (now 50 per cent of current liabilities) which brought the current ratio down to 2 to 1, the cash balance equaled 30 per cent of the bank loan. Had the cash balance before the loan been only 5 per cent of the current assets, after the loan it would still have amounted to 15 per cent of the loan.

Annual "Cleanup" of Loans. A practice usually required of short-term borrowers is that they "clean up," or pay off completely their indebtedness, at least once a year. This condition is predicated on the theory that a short-term loan is a loan to meet a seasonal or other temporary need and that, in the case of a seasonal loan, the sale of the extra inventory and collection of the resulting receivables will provide the funds with which to repay the loan. By "getting out of the bank" once a year, the business demonstrates to the banker that it is using bank funds for temporary needs —the purpose for which they were lent—and that the bank is not supplying permanent capital.

However, the frequency with which loans are renewed and the evidence of the limited data available would indicate that this "requirement" is not universally enforced. Where a loan is obtainable from another bank, the borrowing concern could use the proceeds of the new loan to pay off the old and thus technically meet the letter of the rule. Loans from any other source or allowing trade bills to remain unpaid longer than usual would provide the same result. Further, the growth of revolving credit arrangements based on short-term notes secured by inventory or receivables disregards the annual cleanup rule in that when instituted such arrangements are often looked upon by both bank and borrower as of indefinite duration.

In a period of rapid expansion of business, such as occurred during and after the Second World War, it is easy for loans which start out as short-term loans to become relatively long in duration. With an opportunity to increase sales and profits a business borrows from a bank to add to its

inventory. However, by the time the inventory is liquidated and the loan comes due, the increasing business requires more inventory. If there is no appreciable change in the firm's credit, the bank may yield to a request for a renewal of the loan or an even larger loan, and so on, as long as business continues to increase. What is needed, of course, in this situation is more long-term investment to support the larger current asset needs. With bank credit cheaper than additional owner funds the officers may feel it to their advantage to continue their present loans as long as possible. The danger is that the firm will come to look upon its bank line as relatively permanent. When the bank finally does clamp down and demand payment, permanent capital may be unavailable. Or should business fall off, the slowing down of the circulation of the current assets will result in a shortage of cash. Having already tapped the bank to the maximum, the concern may now have no other source to turn to in order to meet this crisis.

The rapid rise in the price level that occurred in the postwar period had much the same effect in some cases. As low-cost inventories were sold, more cash was needed for the same number of units at higher prices. With higher selling prices a greater investment was required in accounts receivable, and larger cash balances were required to take care of the higher costs of doing business. As the greater cash need was felt, it led to a demand for bank credit. Many banks found themselves under pressure for renewals of these loans as the borrowing firms failed to add long-term funds in proportion to the rise in current assets made necessary by price increases. Actually, a business should try so far as possible to finance any increase in inventories resulting from price inflation through retained earnings rather than borrowing. Otherwise, there is the financial hazard of a later deflation causing weakened debt ratios. Earnings that represent inflationary froth should be retained in the business and not distributed as profits.

In general, wherever renewals are likely, a prior rather than a last-minute understanding is most desirable. Systematic plans for reduction of any bank debt that is not seasonal are also good financial practice. Because long-term funds from the outside are difficult for the small business to obtain, such reduction must frequently depend on retained earnings. Where the banker can see a willingness to maintain sound ratios by such retention, he may be willing to relax the annual cleanup rule. More and more banks and businessmen are coming to prefer the systematic repayment plan of a term loan (discussed in Chapter 18) rather than relying upon an unsystematic renewal of the longer than seasonal loan. So long as the businessman depends upon renewals that have not been contractually agreed upon, he is hazarding his solvency unless he can contract current assets or fall back on other sources of funds.

Methods of Borrowing

Three methods of borrowing from banks on a short-term basis are in common use. (1) Borrowing on a line of credit is employed by frequent and regular borrowers who can typically obtain credit on an unsecured basis. A line of credit is a maximum figure which the bank is willing to have outstanding in loans to a borrower at any one time during a given period—ordinarily a year. The line is established by the bank after an intensive credit investigation as to the maximum amount which can be safely lent on the basis of the facts in the case. Once established the business can borrow any sums it may need up to the line with no more formality than signing a note. The line is not extended by the banker as a binding commitment, but once committed he feels morally obliged to live up to his agreement unless there is a substantial unexpected deterioration in the position of the borrower. At the end of the period for which extended, the line may be renewed for the same, a smaller, or a larger amount after another review of the financial worth of the borrower. (2) For the infrequent and irregular borrower a separate loan application is filed and credit investigation undertaken by the bank as each need arises. Most businesses fall within this class. For some of the more frequent borrowers whose credit is such that security is required for the loan, this method is also employed because of the necessity of appraising collateral and working out varied security agreements for each loan. (3) The final method is the revolving credit arrangement, discussed in detail in the following chapters, which although employing a short-term or demand note is actually a fairly permanent type of financing that may continue uninterrupted for several years.

Exhibit I illustrates the form of an unsecured promissory note used in borrowing from a commercial bank. The note form would be the same no matter what the method of borrowing as long as no security was involved.[11] If the loan was payable on demand rather than in a specific number of days, the line following the date would read: "On demand, for value received, the undersigned promises to pay to the order of."

Unsecured Loans

Lending on the basis of a note signed only by the borrower has accounted for the bulk of dollar value of all loans made by banks to business enterprises in recent years.[12] As indicated at the beginning of the chapter

[11] A secured note form is illustrated on page 384.

[12] For purposes of discussion the authors follow the classification of secured and unsecured loans used by the Board of Governors of the Federal Reserve System in the bank loan survey of Nov. 20, 1946. The Board classifies two-name paper—notes endorsed or cosigned—in the secured loan category.

Some would classify these notes as unsecured, making the distinction between the

these loans amounted to 55 per cent of the amount of all member-bank loans. However, when measured by number of loans outstanding, the unsecured loans were only 35 per cent of the total.

These figures indicate that the average size of the unsecured loans is much larger than that of secured loans. The reason for this is that the larger sized businesses on the average are better credit risks and are better able to borrow without any pledge of assets. If the bank in its

TABLE 2

UNSECURED LOANS AS A PROPORTION OF ALL BUSINESS LOANS OF MEMBER BANKS, NOVEMBER 20, 1946, BY SIZE OF BORROWER [a]

Estimate of Outstanding Loans

Size of borrower, total assets (000 omitted)	As a percentage of all loans to each sized group	
	Amount	Number
Under $50	28.5	36.4
$50–$250	33.7	41.4
$250–$750	39.2	42.9
$750–$5,000	53.7	53.4
$5,000 and over	76.5	70.9
All borrowers	55.3	35.6

[a] Adapted from table in Tynan Smith, "Security Pledged on Member Bank Loans to Business," *Federal Reserve Bulletin*, June, 1947, p. 666.

appraisal of the personal, financial, and economic factors connected with a business enterprise feels that there is too much uncertainty of repayment of a loan when made on an unsecured note, it will demand further protection by requiring the endorsement of the note by others or by pledge of business assets. Medium- and large-sized businesses tend to have better credit than smaller firms because they have been in business on the average for a longer time, their managements have had more experience, and they have had an opportunity to grow through retention of earnings.

secured and unsecured loans on the basis of whether the note is secured by a specific pledge of an asset or not. Actually, no specific pledge of assets exists, and such paper depends upon the general unsecured credit of two parties instead of one. Credit analysis must follow the same general lines as for single-name unsecured paper for the second party.

Because of their financial worth they have access to more and better sources of credit than smaller firms. The relationship between size of business and type of loan (secured or unsecured) is illustrated by Table 2.

There are a number of advantages to being able to borrow on an unsecured note. It gives the business added prestige. It further improves its standing as far as its credit is concerned with other creditors. This is particularly helpful with trade suppliers because with the assets unpledged all creditors are on an equal footing in case of trouble. As a preferred risk such a loan may benefit by a lower rate of interest, and, in case of credit stringency, it would receive better treatment than more marginal risks in matters of renewal or additional advances. The banker finds it less expensive to administer loans where no collateral has to be handled.

As indicated in a preceding paragraph borrowers on unsecured notes are the most frequent users of the line-of-credit method of borrowing. This is an appropriate method for these better credit risks where it is also justified by frequent borrowing. When financial standing is high, the banker can make one investigation at the beginning of the year when the financial statements are available with some assurance that there will be little chance of appreciable change during the period for which the line is extended. In the case of poorer risks he is more apt to want to examine the situation prior to each loan.

Open-market Commercial Paper

Nature and Importance

As illustrated in Exhibit III and described in Chapter 13, open-market commercial paper consists of single-name promissory notes made out to

Exhibit III

Open-market Commercial Paper

$25,000

AFTER DATE WE PROMISE TO PAY TO
THE ORDER OF OURSELVES
TWENTY-FIVE THOUSAND DOLLARS
AT
VALUE RECEIVED

NO. DUE

the order of the borrower and sold at a discount through an intermediary, a commercial paper dealer, to commercial banks desirous of obtaining a short-term high-grade liquid asset. Like unsecured bank loans they lack specific security; their payment at maturity rests on the general credit standing of the issuing firm. The notes are typically of three, four, or six months' maturity.

As a source of funds for business enterprise such borrowing is distinctly unimportant when compared with trade credit or unsecured bank borrowing. Table 3 shows the relatively small amount of commercial paper

TABLE 3

OPEN-MARKET COMMERCIAL PAPER AND COMMERCIAL BANK LOANS OF ALL INSURED COMMERCIAL BANKS OUTSTANDING DECEMBER 31

(Dollar figures in millions)

Year	Commercial paper	Bank loans [a]
1940	$218	$ 7,179
1945	159	9,461
1947	287	18,012
1948	269	18,761
1949	257	16,935
1950	333	21,776
1951	434	25,744

[a] Includes bank holdings of open-market commercial paper.
SOURCE: *Federal Reserve Bulletin.*

outstanding as compared with the total of all other commercial and industrial loans of commercial banks. In comparing the two columns it must be remembered that the bank data include both secured and unsecured loans.[13] In terms of number of businesses using commercial paper as a source of credit it is even less important, since, as explained below, it is restricted largely to medium- and large-sized borrowers who tend to borrow relatively large amounts at one time.[14]

[13] Total business loans are understated by the amount that banks make loans to business secured by real estate. Real-estate loans are excluded from the commercial and industrial classification.

[14] In 1935 it was estimated that only 654 concerns borrowed in the open market. At the end of this year, 171 million dollars of commercial paper was outstanding. [Albert O. Greef, *The Commercial Paper House in the United States* (Cambridge, Harvard University Press, 1938), p. 238.]

Comparative Advantages and Disadvantages

The reasons for the comparative unimportance of commercial paper as a source of funds for business are tied up with its comparative advantages and disadvantages over other sources of funds, particularly bank credit. Since 1920 both commercial paper and bank loans have been of smaller relative importance as a source of unsecured short-term credit, but, of the two, commercial paper has had the greater decline.[15] There has been a trend of large-sized business firms toward making greater use of long-term financing as compared with short-term. Those businesses which, because of their high credit standing, have access to the commercial paper market also for the same reason have the greatest access to the long-term credit and equity markets. Reduction of short maturities lessens financial risk.

One attraction of the open market has been the low interest rates prevailing there for prime paper. With the growth in competition for good loans after 1935, banks have tended to meet the rates which their stronger borrowers could command in the open market.

Table 4 shows the average rates on commercial paper in New York and the average rates on two size classes of loans to business. The cost differential is not as large as it appears to be from these data. The business borrower must in addition pay a commission to the commercial paper dealer—typically ¼ of 1 per cent of the face value of each note handled. On notes with six months' maturity this cost would be ½ of 1 per cent on an annual basis, and for 90-day notes, 1 per cent.

Another advantage of commercial paper is that it permits a business to obtain more funds than are often obtainable from a single bank. However, with the growth of larger banks by mergers, of branch banking, and of the practice of joint participation of a number of banks in a line of credit to a single firm, this advantage has lost much of its force. It may still be more convenient to deal with one commercial paper dealer than to open lines of credit with several banks and negotiate a loan with each separately. As vigorous middle-sized concerns migrate to smaller cities, where banks are smaller, this channel may grow in favor. Borrowing with open-market commercial paper obviates the need for meeting the compensating balance requirement of banks. This may or may not be a factor to consider, as was pointed out above.

The prestige attached to being able to borrow with commercial paper may be important in some cases. The notes are sold to banks all over the country, with the result that they are acquainted with the financial standing of the firm. Should the company at some later date wish to finance with long-term securities, the previous publicity would be of benefit. The

[15] Jacoby and Saulnier, *op. cit.*, pp. 71–109; Greef, *op. cit.*, p. 238.

fact that a company can use commercial paper gives it a bargaining weapon with it own bank or banks. At times, when a bank was pressed to meet the borrowing demands of its customers, it might even welcome a shift of a part of this burden to the open market, especially if it meant no loss of valued deposits to rival banks. The commercial paper dealer at such times channels paper to banks where borrowing demand is less. In this manner, these dealers become an integrating force in our widely scattered unit banking system.

TABLE 4

AVERAGE RATES ON 4 TO 6 MONTH PRIME COMMERCIAL PAPER IN NEW YORK AND LARGE SHORT-TERM BANK LOANS TO BUSINESS

(In per cent)

Year	Commercial paper	Short-term loans	
		$100,000–$200,000	$200,000 and over
1940	0.56	2.0	1.8
1942	0.66	2.2	2.0
1944	0.73	2.6	2.2
1946	0.81	2.2	1.7
1947	1.03	2.5	1.8
1948	1.44	2.8	2.2
1949	1.48	3.0	2.4
1950	1.45	3.0	2.4
1951	2.17	3.4	2.9

SOURCE: *Federal Reserve Bulletin.*

The greatest disadvantage of commercial paper to the borrowing business is that it must be paid off at maturity. Ordinarily this is of little concern, because the old notes can be paid off with the proceeds of the sale of new notes. However, in times of severe credit stringency the company might not be able to depend on the open market for funds. Because of the closer personal relationship between bank and customer, a firm borrowing from a bank could more safely count on having its loan renewed. On the other hand, it might be desirable to use commercial paper to keep bank credit lines open as a matter of protection. From the standpoint of business as a whole the disadvantage of commercial paper as a source of funds is that it is just not available to the vast majority of small businesses. Commercial paper dealers because of the overhead involved cannot afford

to handle small sales of paper. Only larger firms are in the market for large sums, and, of these, many cannot qualify on the basis of the high credit standards demanded.

Characteristics of Borrowers

In addition to the points made above of medium or large size, high credit standing as evidenced by balance-sheet ratios, quality of management, and a record of successful operation, companies using commercial paper will ordinarily have heavy seasonal demands for funds. By tailoring the maturity of the notes to the period of need, this form of borrowing provides an excellent method of meeting the enlarged cash demands.

As would be expected because of the nature of their current asset requirements, users are concentrated in the manufacturing and the retail and wholesale trade categories. Within these groups the principal concentration is found in foodstuffs, textile products, metal goods and hardware, lumber and furniture, and leather and shoes. Finance companies are the only other type of concern outside of the trade and manufacturing fields using this source to any degree.

Other Sources of Unsecured Credit

Short-term unsecured credit may be obtained from a variety of other institutions and noninstitutional sources. These other sources are for the most part unimportant as compared with trade and bank credit. For this reason little space will be devoted to them, although it should be realized that in individual cases one or more of these sources might supply a significant proportion of funds or necessary funds at a very crucial time. These loans may be secured or unsecured and for either a short or a long maturity. Because of lack of information about most of them, it is impossible to ascertain the relative importance of the various categories.

Loans from Officers, Stockholders and Partners, Relatives, and Friends

A loan from one of these sources is often the only credit available to small businesses except perhaps for a certain amount of trade credit. It would tend to be most important in very small firms and be of decreasing importance in larger firms. As the size of the firm increases, it is able to tap the more conventional forms of business credit. Since the amount that ordinarily will or can be lent by one of these personal sources is limited, it is likely to be of limited importance.

A major advantage of this class of credit besides that of availability is that, because it comes from a person either directly or indirectly interested in the welfare of the business, the need for prompt payment at maturity is not so pressing as is the case of more formal advances. Most

such creditors would hesitate to force payment if it meant termination of the business. A loan from an owner does not need to reduce the over-all borrowing power of the firm because the owner-lender may subordinate his claim to that of another creditor if additional funds are needed. (Loans of owners in unincorporated businesses are automatically subordinate to other creditors' claims.) It is likely that many such loans, although short-term in original maturity, are in fact of intermediate or long term.

Another advantage from the standpoint of the business is that interest cost may be low or nonexistent.

Accrued Expenses

Accrued taxes and wages, the most important of the accrued expenses found on business balance sheets, were discussed in Chapter 13. These accruals arise out of the method of conducting business or method of tax collection. Although a source of funds in the sense that the nonpayment of the expenses on the day incurred keeps funds in the business, they cannot be regarded by the businessman as a source of credit to be tapped as needed.

Personal Loan and Industrial Banking Companies

A businessman may obtain relatively small sums from personal loan or industrial banking companies for business purposes, although most borrowing from these institutions falls in the category of consumer credit.[16] Ordinarily these sources of credit would be used as a last resort because of the high cost of the loans. The loans are generally repaid in equal monthly installments. The interest rate charged by personal loan companies is typically 2 to 3 per cent per month on the unpaid balance, an effective annual rate of 24 to 36 per cent. Rates charged by industrial banks are usually 5 to 9 per cent on an annual discount basis, with an additional charge of 2 per cent of the original balance as an investigation fee. An extra fee may be levied for late payment. Since with equal monthly installment repayment the average balance of the loan outstanding is about one-half of the original amount borrowed, the effective annual interest rate is roughly twice the discount rate plus the investigation fee.

Both institutions make loans on a secured and unsecured basis. In the absence of a salary from an independent source, the repayment of an unsecured loan by an owner-operator is dependent upon his ability to make

[16] A study of the percentage distribution of loans made by three personal finance companies for the period 1934 to 1937 by intended use of funds showed that approximately 6 per cent were for business purposes. [Ralph A. Young and Associates, *Personal Finance Companies and Their Credit Practices* (New York, National Bureau of Economic Research, 1940), p. 62.]

a net profit which he can draw on. Security, if required, is typically a chattel mortgage on his automobile or business equipment or fixtures.

The loans vary in maturity from a few months up to three years for the personal loan companies and run for slightly longer periods in some states for industrial banks. The industrial banks generally have more leeway in the type and size of loans they make. In some states the maximum size of the loan is not limited as it is in the case of the personal finance companies. Some industrial banks make many of the same type of loans as commercial banks. In fact, the recent tendency has been for such banks to acquire regular commercial banking charters or merge with established commercial banks.

Deposits and Advances Received from Customers and Clients

Many businesses operate by collecting from their customers before rendering the service. Thus, telephone, electric, and gas companies sometimes require payment of one month's bill or a fixed sum in advance. Ice companies, dairies, and restaurants sell coupons and meal tickets redeemable in merchandise or service. Railroads sell tickets good for a certain period of time, and bus and streetcar companies sell tokens and coupons. The extent to which this type of financing can be used depends on the type of business and nature of operations. To the extent that a business can use this method of collection it reduces the amount of other financing necessary. These funds are often costless in the sense that the company pays no interest. On the other hand, where a discount is given for purchase of a meal ticket or a given number of streetcar tokens, the discount might be regarded as a cost. It is, of course, also possible that such a discount may be designed to stimulate sales.

Sometimes a large customer may make advances to a manufacturer, especially where the latter is to deliver specially designed or very expensive products. Such prepayments may be important in financing work in process and may also protect the vendor against contract cancellation.

Advances from Affiliates

A parent company may lend to a subsidiary, or vice versa, or because of common ownership or interlocking directorship one firm may lend to another.

Summary

Most short-term credits used by business are unsecured. Of the general classes of unsecured creditors, trade suppliers advance the greatest volume of funds. Second in importance are commercial banks, with loans

from owners, relatives, and friends, customer and other advances, and loans from consumer credit institutions of lesser significance.

A business will generally borrow on an unsecured basis if possible. The prestige of the firm is thereby enhanced in the eyes of other creditors and customers. When an asset is pledged, one creditor is put ahead of the others as far as claim to that particular property is concerned. The general credit of the firm is reduced because other creditors hesitate to lend as much as they otherwise might. Their position is weakened by the priorities given those who are secured.

Borrowing from a bank has distinct advantages over the use of trade credit. The cost of bank credit is substantially less. It is possible to obtain a relatively large sum from a single source and for a longer period of time. On the other hand, bank credit is less convenient in some respects. Trade credit is relatively easier to obtain in the purchase of goods or services, while to borrow from a bank requires some effort and perhaps results in some restrictions on the business.

Extension of credit is only one of a number of services provided business firms by banks. However, for a firm that needs short-term credit it is an exceedingly important function. It therefore behooves a business to look ahead to the possible time when it may need a loan. Proper planning involves the choice of a bank that is loan-conscious and familiar with the industry. In addition, the financial officers can do much to pave the way for favorable action on a loan application by familiarizing themselves with the personal, financial, and economic factors that shape the loan decision and so far as possible meeting their bank's requirements along these lines.

Open-market commercial paper provides a means for obtaining short-term unsecured credit in relatively large amounts by businesses that have sufficient size and superior credit standing. It provides funds at a lower rate than can ordinarily be obtained from banks but suffers as compared with bank credit because of the impersonal nature of the market, which may mean that it will be unavailable when most needed in times of stress.

Small businesses because of their size or lack of experience of management often cannot obtain bank loans. This class of firms must rely for credit to a greater extent on loans from individuals—participants in the business or their friends or relatives. To the extent that this form of credit is available it is more flexible than that of bank credit or other institutional sources of funds. Because of the typically poorer financial standing of small businesses they do not have as many alternate sources of short-term funds to choose from. For the same reason, where borrowing on a promissory note is possible, security must more frequently be pledged.

Questions

1. In what principal ways does trade credit differ from bank credit? What accounts for these differences?
2. Why has the commercial bank always been accepted as a source of short-term rather than long-term credit? How and why has this situation changed in fairly recent years?
3. What are the common characteristics of the so-called "typical" bank loan?
4. What accounts for commercial bank rates typically being lower than alternative forms of short-term credit? Why are general rate comparisons not too meaningful?
5. What accounts for the dominance of the commercial bank in the short-term cash-lending field?
6. What is the significance in the difference between an interest-bearing loan and a discounted loan?
7. What are the principal points of interest to the bank loan officer in determining a business's right to credit?
8. What is a line of credit? A compensating balance?
9. Why do the unsecured loans of banks tend to increase in number as the size of the borrower increases?
10. What is the particular function of a commercial paper house?
11. What are the advantages and disadvantages of borrowing through commercial paper houses?
12. Why is this method of short-term borrowing not more popular?
13. What are the circumstances that generally underlie individual short-term loans from persons or other businesses?

Chapter 16. SHORT-TERM CREDITS: SECURED BY ENDORSEMENT OR INVENTORY

Nature and Importance

A credit is said to be secured when some property is pledged or mortgaged to give the creditor further assurance of payment. The most common security found in business is the mortgage upon real property. Other kinds of property which are often used to secure a loan are inventories, accounts and notes receivable, and stocks and bonds. The Federal Reserve System as a matter of convenience also classifies as "secured" loans those which have the credit of some individual or corporation other than the borrower behind them. Such loans are more exactly thought of as "unsecured two-name paper." They have behind them the general credit of two names rather than one. They are most often used in the borrowing of small, closely held corporations where the lending institution requests one or more of the owner-officers to endorse the corporation's note.

Secured credits of any sort are nearly always evidenced by a promissory note. In this respect they differ from trade credit, which involves no formal credit instrument. The secured promissory note (Exhibit I) is similar in most respects to that used in an unsecured loan except that it generally provides for a listing of the security and the conditions under which it may be seized by the creditor. To implement the pledge, other documents may supplement the note. These may be documents of title to the assets, supplementary agreements between borrower and lender, and insurance policies on the pledged assets. These will be described in more detail in later sections of this chapter when each type of loan is taken up individually.

Sources of Secured Credits

Most short-term secured credits are obtained from financial institutions rather than private individuals. The institutions are, in order of importance, commercial banks, commercial and sales finance companies, and factors. Other institutions making secured short-term loans, such as government agencies, personal finance companies, and credit unions, are relatively unimportant. Individuals—owners, relatives, and friends—contribute but negligibly to the total supply.

EXHIBIT I

PROMISSORY NOTE (SECURED)

Due.................................. $...

No.................. Evanston, Ill.,...

....days after date, for value received, the undersigned (jointly and severally) promise.... to pay to the order of

First National Bank and Trust Company of Evanston

....Dollars

at its banking house in Evanston, Illinois, with interest at the rate of..................................per annum after date until paid. The undersigned hereby deposit.... with and pledge.. to said Bank as collateral security for the payment of this note and of all other liabilities of the undersigned and of any of each of the undersigned (if more than one) to said Bank, or the legal holder of this note (whether direct or contingent, joint or several, heretofore or hereafter contracted, and howsoever or whensoever acquired by said bank or legal holder) the following property, the value of which is $..viz:

....

....

And to secure the payment of said amount and interest the undersigned hereby authorizes irrevocably any attorney of any Court of Record to appear for the undersigned in any such court in term time or vacation, at any time hereafter, and confess judgment without process against the undersigned or any or either of the undersigned (if more than one) in favor of the holder of this note for such amount as may appear to be unpaid or owing thereon, together with costs and reasonable attorney's fees, and to waive and release all errors which may intervene in any such proceeding, and to consent that no writ of error or appeal shall be prosecuted upon the judgment entered by virtue hereof, nor any bill in equity filed to restrain or interfere in any manner with the operation of such judgment or any execution that may be issued thereon, and to consent to immediate execution upon such judgment, and that any execution that may be issued upon such judgment may be immediately levied upon and satisfied out of any personal property of the undersigned, and to waive all right of the undersigned to have personal property last taken and levied upon to satisfy any such execution, hereby ratifying and confirming all that said attorney may do by virtue hereof.

In case said Bank or the legal holder of this note shall at any time hereafter be of the opinion that said property (including all substitutes therefor and additions thereto) is worth less than or has declined below the value above stated, or in case the undersigned or any or either of the undersigned (if more than one) shall fail to furnish additional security satisfactory to said Bank or legal holder whenever called for, or shall fail to pay at maturity or any time thereafter this note or such other liabilities, or shall be or become insolvent, or shall die, or a judgment or decree be entered against the undersigned, or any or either of the undersigned (if more than one), then and in each and every such case or contingency full power and authority is hereby given to said Bank or legal holder to sell, assign and deliver said property and all substitutes therefor and additions thereto, or any part thereof, at any time and from time to time, at any Broker's Board or at public or private sale, at the option of said Bank or legal holder, without advertising the same, or making protest, or demanding payment, or giving any notice of any kind to anyone, and said Bank or legal holder may be a purchaser at said Broker's Board, or public sale or sales, and after deducting from the proceeds of any such sale or sales, all costs, expenses, and reasonable attorney's fees incurred in and about said sale or sales, or the protection or collection or conversion of said securities, or the collection of this note or such other liabilities, the residue of such proceeds shall be applied upon this note and such other liabilities, whether then due or not due, as and in the proportion said Bank or the legal holder of this note may deem best, returning the surplus, if any, to the undersigned, or to any or either of the undersigned (if more than one). Said Bank or the legal holder of this note may at any time, either before or after the maturity of this note, appropriate and apply any and every indebtedness (including all moneys on deposit, credits, balances, moneys, collections, drafts, bills, notes, checks and property of every kind, tangible and intangible, whether in custody or in transit), due or owing from said Bank or legal holder to or held for the undersigned, or any or either of the undersigned (if more than one) upon this note and such other liabilities, without protest, or demand upon, or notice of any kind to anyone, and may make such appropriation and application as and in such proportion as said Bank or legal holder may deem best. It is expressly understood and hereby agreed that in the event the undersigned, or any of them, become insolvent before the first above mentioned time of maturity of this note, then that this note shall simultaneously with the happening of such insolvency become due and payable. Demand, protest and notice of non-payment is hereby severally waived by the makers, endorsers and guarantors.

Rate	Days Disctd.	Amt. of Disct.	Approval

NEW RENEWAL

....

....

Business Address:

....

101-A-5M-10-49 OVER

Relative Importance

Secured borrowing constitutes a comparatively small proportion of the total short-term credit supplied to business. The reason lies in the dominance of trade credit. In the important field of bank credit, we have already noted the leading position of single-name unsecured paper. In the previous chapter it was pointed out that the various types of secured loans of leading member banks comprised only 43.8 per cent in amount and 61.1 per cent by number of loans to business in November, 1946. Even these totals included two-name unsecured paper (see table on page 352). Almost all loans by commercial finance companies and factors are on a secured basis. It was estimated that at the end of 1944 more than 288 million dollars of loans by commercial finance and factoring companies were outstanding to business enterprises.[1] Most of these were short-term and secured.

[1] N. H. Jacoby and R. J. Saulnier, *Business Finance and Banking* (New York, National Bureau of Economic Research, 1947), p. 196.

Reasons for Use of Secured Loans

In view of the advantages of borrowing on an unsecured basis cited in the previous chapter the question naturally arises as to why businesses use secured loans at all. There are four general reasons. (1) The credit position of many firms is such that they can find no institution that will make an unsecured loan. Rather than not have the funds available at all, they pledge assets, or the officers sign the notes, or both. (2) Secured notes are used as a device for obtaining *more* credit than is available on an unsecured basis. (3) Factors and, to a lesser extent, the commercial finance companies furnish other business services in addition to the money advanced. Business establishments choose to borrow from these institutions, even though a pledge of assets is demanded, in order to avail themselves of these other services. (4) In some circumstances a firm can obtain funds at a cheaper rate by giving security. Collateral security may reduce the risk to such an extent that the lender is willing to advance funds at a lower rate than on an unsecured basis in spite of the additional costs involved of handling the collateral.

The size of the business is a primary factor in determining whether a loan must be secured or not. Typically smaller businesses are riskier from a credit standpoint. The small businessman often has poorer records, which makes it more difficult for a loaning institution to appraise the financial worth. On the average they have been in existence a short time so that the lender has a shorter history from which to judge the experience and capability of management. And small businesses having less access to other means of financing will often need or want a larger loan in relation to net worth than a larger business. To protect itself in such situations, the lender therefore will more often demand collateral protection. This is well illustrated by Table 2 on page 373, which shows how, for bank loans, the proportion of unsecured loans to total loans increases with asset size of the borrower.

It is typically in the small firm, too, that the greatest difference in risk is present between a secured and an unsecured loan. A bank can often ascertain the value of pledged collateral with greater certainty than the general credit factors of a small, not well-established business.

Businesses with sharp seasonal peaks, like canning companies, have a large need for funds to purchase and carry inventory during a few months of the year. Since the amount of funds needed may exceed the net worth by several times, a lender would be reluctant to lend on an unsecured basis to carry the huge inventory. The margin of protection against loss provided by the equity would probably be deemed insuffi-

cient. But with the inventory itself pledged as security—an asset that can be seized and sold in event of nonpayment—the creditor is much more willing to lend the funds needed.

Another situation in which businessmen often make use of secured loans is where a business is growing rapidly. There is a need for additional permanent investment to supply the larger current asset needs, but the business, either because of inability under any circumstances, too high cost, or reluctance of the owners to share control does not increase the net worth fast enough to keep up with the increase in sales. Certain types of inventory and receivable financing are available in such a situation which, although relatively permanent in nature, are classed as short-term. These loans, generally classed as "revolving credits," are described in succeeding sections.

Factors Determining Type of Security Pledged

Relative Importance of Different Types of Secured Loans

Table 1 shows in percentage form the relative importance of the various types of secured loans of commercial banks, including those

Table 1

Secured Loans of Member Banks, November 20, 1946

Estimates of Outstanding Loans

Major types of security	Percentage distribution	
	Amount	Number
Endorsed and comaker	12.2	18.5
Inventories	20.6	8.6
Equipment	12.2	27.1
Plant or other real estate	16.3	18.7
Stocks, bonds, and mortgages	18.5	11.3
Accounts receivable	3.3	3.1
Life insurance	2.6	5.3
Assignment of claims	5.4	4.8
Other	9.1	2.6
Total	100.0	100.0

Note: Figures may not add to total because of rounding.

"secured" by the general credit of someone other than the borrower.[2] Endorsements and four types of assets—inventories, securities, real estate, and equipment—account for the majority of all loans. Finance companies and factors, the other chief institutions employing secured loans, however, do not have as great a diversity of collateral backing their advances. Most of the lending by these institutions is secured by accounts and notes receivable although they do make loans to a limited extent on all types of assets. The reason for this concentration results from their early development of these types of lending and the building of organizations especially adapted to handling the immense detail and follow-up characteristically required.

Several factors determine the type of security that will be pledged to secure a loan, (1) the kind of business as it bears on the character of assets owned, (2) the financial institutions available, and (3) the type of security device required by the lender.

Type of Company and Character of Assets Available

The type of business will, within broad limits, determine the nature of assets owned. The assets of a wholesaler consist largely of inventory. A bus company has very few current assets and mostly fixed assets in the form of equipment. Manufacturing companies vary considerably but, on the whole, are somewhere midway between public utilities and trading concerns in the proportion of total assets in current and fixed form. The bus company borrowing on a secured loan would have virtually nothing else except its busses to pledge. On the other hand, the wholesaler finds his inventories both the most plentiful and logical asset to pledge as well as the cause for financing. However, as will be seen in the following discussion of the characteristics of lending against various types of assets, there can be a variety of factors affecting the suitability of the asset itself as security.

Type of Financing Available

Although there may be 8 to 10 different types of institutions and agencies that lend to business, this does not mean that a particular business searching for funds, even though its credit status is reasonably satisfactory, will have a choice among this group or that all secured lending devices will be offered by the sources available to it.

The geographical location of the borrowing firm will influence the type of financing available. The closer it is to the offices of the lending institutions, the better the service that will be available. In some kinds of

[2] Tynan Smith, "Security Pledged on Member Bank Loans to Business," *Federal Reserve Bulletin*, June, 1947, p. 665.

secured loans lenders feel that they must watch the pledged collateral closely and make frequent checks of the debtor to see that it is living up to all conditions of the loan agreement. A firm at some distance from a finance company or factor, for example, might find that these sources of loans were unavailable, or available only at a prohibitive cost.

The presence or absence of a particular method of financing may depend on the state where the borrower is located. There is considerable variation among the states as to the type of legal devices a lender can use to protect itself in case of bankruptcy of the debtor. Some states permit factor's liens and others not; the laws on the validity of trust receipts show considerable variations, as do the laws relating to chattel mortgages and conditional sale agreements. Thus in one state factor's liens will not be used, and in another lending on the security of accounts receivable will be at a minimum because of unfavorable aspects of the law.

Competition among lenders has a great bearing on the type of financing and the conditions under which it will be offered to prospective borrowers. Until the early 1930's the commercial banks did not actively participate in lending against accounts receivable and in making installment loans on equipment. Some banks not under severe competitive pressure still do not make these types of loans. A borrower in a large urban center would benefit most by having access to a large number of competing institutions. In smaller cities where competition is not so keen, fewer borrowing opportunities are available.

The Choice of the Security Device

By security device is meant the legal means employed by the lender to ensure the precedence of his claim to the pledged assets in case of insolvency of the business. The discussion of the various forms of lending that follows explains the type of circumstances in which each device is applicable. Here only the general factors that bear on the problem are recited to show how they may affect a particular loan.

The credit of the business borrower, the nature of the business operation, the purpose of the credit, and the nature of the state laws on lender-borrower relationships are all important in determining the type of lien established. The businessman of course is interested in that type of loan which can be obtained at the least cost and will least hamper his operation. However, in most cases it is the lender and not the borrower that determines the security device used. In the matter of credit standing, at one extreme is the business that is able to borrow on an unsecured basis; at the other is the business whose credit is so poor that the lender must put almost complete reliance on the collateral to ensure repayment of the loan. In the former case, there is no impediment to the use of the assets

as the business sees fit. In the latter case, the lender may insist on having actual physical possession of a particular asset or in lodging the asset in the hands of a third party—a bailee or trustee—where it cannot be misappropriated by the borrower.

The nature of the business determines the type of assets used by the borrower, and they in turn condition the security device that can be used. A trust receipt may be used for inventory but not real property, and when used in inventory financing it is applicable only to certain types of goods. A business whose inventory consisted of many items of small unit value, like that of a retail grocer, would find it impractical to secure their release from a chattel mortgage as individual sales were made. Automobiles have a large enough value to justify the work of pledging and releasing units as they are bought and sold. The same might be true of groceries held in case lots by a wholesaler. In the same fashion, it would be laborious and unusual to set up machinery for pledging receivables for a small sum or for a loan which was to be used, say, for only 30 days. Other reasons for tailoring the security device used to the particular business situation will be made clearer in the subsequent discussion.

Methods of Borrowing

In the following discussion of methods of borrowing the primary emphasis is placed on the requirements and practices of the lending institutions. The businessman with a knowledge of these requirements will be better able to appraise the possibility of obtaining a loan, the amount of credit he can get, and the restrictions or obligations that will be placed on the business. Credits are divided first by principal type of security and under each class of security further divided by the different security devices used.

Two-name Paper

This category includes all loans secured by the promise to pay of two or more individuals or institutions. Two or more names appear on the credit instrument, and the loans are known as "endorsed" or "comaker" loans. Table 1 showed that these loans accounted for 12.2 per cent by dollar amount and 18.5 per cent by number of all outstanding loans of member banks on November 20, 1946. The differences between a comaker and an endorser are primarily of a technical legal sort. A comaker signs the face of the note with the borrower, while an endorsement usually appears on the back of the note. At maturity the comaker note can be presented to either of the makers for payment, while the creditor under an endorsement can hold the endorser for payment only after default by the

debtor. In either case the bank is protected by two (or more) names, and so from a financial standpoint the difference is largely irrelevant.

The lender will require the borrower to obtain a comaker or endorsement on the note when he feels that the risk of lending on the name of the borrower alone is too great. In some cases an endorsement is required even though the loan is secured by a pledge of business assets. It is common practice to request the major stockholders of closely held corporations to endorse the notes of their firm. By so doing they, of course, lose the limited liability advantage of the corporate form of organization with respect to these specific loans. In the case of loans to partnerships and proprietorships the endorsement to add any security must be that of an outsider since the creditor already has recourse to personal assets of owners (subject to the rules of marshaling in the partnership). The lender will investigate the financial worth of the cosigner or endorser to make sure that there is substance to the protection in the sense of the second party having sufficient resources to make payment if the business itself defaults.

When some collateral protection is required, this method has the advantage from the borrowing business's point of view that it does not interfere with the normal operation of the business as some types of inventory- and receivable-secured loans may do. If an acceptable endorser can be obtained, these loans are more convenient than going through much paper work required in pledging of assets. The prime disadvantages are the possible loss of nonbusiness assets (if endorsement is by an officer or owner) if the business should run into trouble, the difficulty of securing acceptable outside endorsers, and the hazard of antagonizing a close associate unwittingly should he, as endorser, be required to make good the business's obligation.

Inventory Loans

General Characteristics. Loans secured by inventory are obtained to finance the storage, processing, or shipping of commodities. Businesses borrow when possible on an unsecured basis to finance inventories and in many cases borrow by pledging other assets because conveyance of title to the lender may interfere with the borrower's use of the inventories. From the lender's point of view many short-term unsecured loans are in a sense inventory loans too, because that is the essential purpose for which they are granted. It can be argued, even, that loans to help a business finance its receivables are indirectly inventory credits in the sense that the investment in receivables itself arises out of the seller financing inventory needs of the buyer. The term "inventory loan," however, has

come to be applied only to those cases where inventory is actually offered as pledged security.

Because of the purpose for which they are used, these loans are typically of shorter term than loans secured by other forms of more fixed property with the exception of accounts receivable.[3] They are frequently demand loans rather than having a specific maturity. The reason for this will be explained in the discussion of the security devices used. A number of factors influence the use of inventory for security as well as the percentage of value that will be advanced thereon. These are:

1. *Credit position of borrower.* The better the financial position, the less the reliance that need be put on the inventory.

2. *Perishability of product.* A perishable product involves more risk. Not only must more care be taken in storage, processing, and shipment, but if it is not sold within the normal turnover period, its value may decline appreciably. Such merchandise does not lend itself well for pledging and if used generally carries with it a high margin of safety.

3. *Marketability.* This is a prime requisite for a loan. Financial institutions can afford to loan a large percentage against such staple commodities as wheat, corn, copper, sugar, etc., commodities that have a continuous and well-established market.[4] Goods-in-process inventory is an example of inventory that lacks marketability. For this reason it cannot be used as a basis for borrowing in most cases. Businesses using basic grades of staple raw materials would have a better basis for borrowing than those using semimanufactured or processed articles. The nature of the business, again, determines the marketability of the finished goods. A lumber dealer, for example, would ordinarily have a more marketable inventory and so could offer a better security than a manufacturer of branded cosmetics.

4. *Price stability.* The more stable the price of products, the greater is their loan value. A bank cannot afford to loan a high per cent to value if during the period of the loan there is a possibility of a drop in price that will bring the value of the pledged inventory to less than the face value of the note.

5. *Nature of lien.* The easier it is for a lender to get possession of the pledged inventory in case of insolvency of the debtor and the less chance

[3] Nearly nine-tenths of both the number and amount of inventory loans held by member banks on Nov. 20, 1946, were written with maturities of less than six months. Practically all were less than one year in maturity. *Ibid.*, p. 672.

[4] The Board of Governors of the Federal Reserve System defines a "marketable staple" as "an article of commerce, agriculture, or industry of such uses as to make it the subject of constant dealings in ready markets with such frequent quotations of price as to make (*a*) the price easily and definitely ascertainable, and (*b*) the staple itself easy to realize upon by sale at any time." (Regulation C, Series of 1928, p. 3.)

for fraud, ordinarily the less the risk and thus the greater the percentage of value loaned. Pledge of a warehouse receipt gives the creditor greater security than a factor's lien. In the first case the goods are in possession of a third party, a warehouseman, while in the latter case they are in possession of the borrower.

In regard to cost, inventory loans are typically higher than many other types of secured credits. The reason lies in the nature of the assets pledged. Most inventory items are easily movable and turn over rapidly in the ordinary course of business, and the specific inventory articles which are the security for the loan are often difficult to identify. When inventory is required as security, lenders are concerned about two points in addition to ensuring that the value of the inventory is in excess of the loan. These are protection against fraud on the part of the borrower and ensuring that they have first claim against the inventory over all other creditors in case the borrower becomes insolvent. If the creditor does not have a fully defensible claim to *specific* items of merchandise in event of foreclosure, the supposed protection becomes illusory. In endeavoring to protect themselves as much as possible on these two points considerable costs may be involved, either directly by the creditor or by the borrowing firm. In either case they are included in measuring the total cost of the credit.

Security Devices Used

1. *Warehouse receipts.* Borrowing on the pledge of warehouse receipts is the most important method of obtaining funds by secured inventory loans. It accounted for approximately 80 per cent of all such loans of member banks on November 20, 1946.[5] It is probably much less used by other financial institutions. A nonnegotiable warehouse receipt is illustrated in Exhibit II below. A warehouse receipt is a document of title which permits the legal holder to obtain possession of the stored goods upon payment of all the warehousemen's charges. In negotiating a loan the lender will require warehouse receipts issued by a bona fide warehouseman—one defined by the Uniform Warehouse Receipts Act as "a person lawfully engaged in the business of storing goods for profit." Although the borrowing firm can usually select the warehouse company, the lender may not accept warehouse receipts as security unless it feels that the warehouse company is financially responsible. All warehouses must be bonded to secure a license. The bond is to secure performance of the warehouseman's obligations under the law, but since the bond requirement varies considerably between states, it may be that a warehouseman taking out the minimum legal bond offers inadequate protection.

[5] Smith, *op. cit.*, p. 665.

Exhibit II

Nonnegotiable Warehouse Receipt

Non-Negotiable

WAREHOUSE RECEIPT

SERIAL NUMBER

GSN

Douglas-Guardian Warehouse Corporation

New Orleans, La.
118 North Front St.

Chicago, Ill.
100 West Monroe St.

Date________________

This is to Certify, that the undersigned (hereinafter designated as CORPORATION) has received in storage and holds in warehouse number__________ located________________________

for the account of________________________

the following property, as described by the Depositor, subject to the terms and conditions herein and on the reverse hereof, to be delivered upon proper written order, without surrender of this receipt.

The Corporation claims a warehouseman's lien for all lawful charges for storage, preservation and examination of the goods; also for all lawful expenses incurred for the protection and preservation of the goods, interest, insurance, transportation, labor, weighing, coopering, and other charges and expenses, in relation to such goods, and such other lawful charges and expenses as are provided in and defined by the Uniform Warehouse Receipts Act of the state where the goods are stored.

The Corporation shall not be liable for any loss or damage caused by fire, lightning and/or tornado, or acts of God, and does not carry insurance on articles described herein. The Corporation has no ownership in the goods or merchandise covered hereby.

The description of this merchandise is furnished by the Depositor thereof, and the Corporation shall not be responsible for any errors contained in said description or for any shrinkage, evaporation or other loss sustained through the inherent nature of the below described goods. The Corporation shall not be liable in event the locations herein specified should be insufficiently or incorrectly described for insurance purposes.

Lot No.	Building or Section	Quantity	DESCRIPTION OF PROPERTY	Marks
			SPECIMEN NON-NEGOTIABLE	

TOTAL QUANTITY
OF GOODS (Written)________________________

Warehousing Charges________________________

DOUGLAS-GUARDIAN WAREHOUSE CORPORATION

By________________________
Vice-President — Asst. Sec'y-Treas.

Documents besides the warehouse receipt necessary to complete a loan transaction are:

a. Note
b. Certificate of valuation
c. Statement of ownership
d. Insurance policy

(*a*) The note itself may be either a demand note or a time note.[6] (*b*) A certificate of valuation is a document listing the warehouse receipt number, name of the warehouse company, place where goods are stored, number of items pledged, description of the articles, price, and grade, if any, and the total valuation. The lending institution will always check the price or value shown by requesting copies of invoices or cost records or if necessary obtaining an independent appraisal. (*c*) A statement of ownership is merely a statement by the borrower that he has legal title to the deposited goods. A warehouse receipt is not a guarantee of title because the depositor of commodities can transfer to the warehouseman and holder of his warehouse receipt only that title to the deposited commodities which he himself possesses. Careless banks have found that they have made unsecured loans when they later found out that the goods covered by warehouse receipts in their possession had been sent to the borrower on consignment. Banks may ensure ownership in the borrower by requesting copies of paid invoices or having the goods shipped by the seller directly to the warehouse, the bank making payment directly to the seller with the proceeds of the loan.

(*d*) The warehouseman is merely a custodian of goods stored. He is responsible not for the quality of the goods but only for the actual count and apparent identification. Nor is he responsible for loss by fire, theft, tornado, flood, or any other commonly insurable hazard in the absence of negligence. Lenders require prospective borrowers to insure the goods against fire and other hazards depending on the nature of the goods and location. The policy will have to be endorsed to show the interest of the lender, and the policy or a copy of it will have to be delivered along with the other documents named above.

Warehouse receipts are negotiable or nonnegotiable. The nonnegotiable receipt is most frequently used in lending operations because of the ease with which partial release of merchandise from the warehouse can be accomplished without surrendering the receipt. It is made out in the name of the bank or finance company, and orders for delivery of merchandise can be made by letter or order. If a negotiable receipt is used, it must

[6] It was estimated that 37 per cent by number and 52 per cent by volume of all member-bank inventory loans were demand notes on Nov. 20, 1946 (*ibid.*, p. 680).

be sent to the warehouse every time a release is desired. There is always the possibility of loss or theft while out of the hands of the lender.

For the purposes of describing the method of financing by the use of warehouse receipts it is convenient to divide all warehouses into two classes, public warehouses and field warehouses. Financing on the basis of receipts issued by public (or terminal) warehouses has been a long-established practice for the carrying of staple commodities. Field warehouse financing, in which the goods are stored on the premises of the borrower, is a more recent development and for many firms is more convenient than the use of a centrally located building.

A field warehouse is established by leasing part of the premises of the borrower to a warehouse company for a nominal rental. This may be part of a yard which is separated from the rest of the business property by a fence, it may be a separate building, a tank, a refrigeration chamber, or it may be a single room or part of a room. The depositor (the borrower) executes an agreement with the field warehouse company covering the conditions of the arrangement, including its duration. This agreement will specify the fee to be paid the warehouse, generally a fixed annual rental plus a percentage of the value of all goods passing through the warehouse. To establish a valid field warehouse, the warehouseman must be given "continuous, notorious, and exclusive possession." The warehouse property must be so segregated from the rest of the premises that only the warehouse company or its authorized representatives have access to it. It must be posted with signs giving notice of the warehouseman's occupancy and that all merchandise and goods stored therein are in his custody.

Finally the warehouse company hires a warehouse manager—a custodian—who is generally an employee of the borrowing company familiar with the handling and storing of the goods to be kept in the warehouse. He is put on the payroll of the warehouse company and bonded. He issues the receiving records which are used as the basis for the issuance of warehouse receipts by the nearest office of the field warehouse company, and he releases goods from the warehouse only on release orders signed by the holder of the warehouse receipt.

Whether a borrower pledging inventory on the basis of warehouse receipts uses a terminal or field warehouse will depend on the nature of the business and the relative costs. Many distributors, wholesalers, and others deal in commodities without ever bringing them onto their own premises. They are purchased and stored until sold in a public warehouse. Manufacturers, distributors engaged in repackaging commodities, and retailers must have their materials and merchandise close at hand. A business in this latter group has the option of trucking the goods to a terminal ware-

house or establishing a field warehouse on its own premises. A field warehouse saves on trucking costs but involves higher warehousing charges. The greater the turnover of the warehoused goods, the greater the convenience of a field warehouse as compared with the public warehouse. Ordinarily the lender and the warehouseman will agree on a tolerance to be allowed the borrower in withdrawing goods so that his operation will not be unduly handicapped.

Because of the costs involved, a borrower would not ordinarily go to the trouble of having a field warehouse set up on his premises if his credit need was short and intermittent. The average life of a field warehouse is two to three years.[7] It can be used advantageously by businesses that need credit on a continuous basis. It provides a means of closely meshing financing with inventory needs. It is a means for facilitating revolving credit in that the credit instruments are short-term, but the life of the credit itself is of intermediate duration. Not only do the instruments revolve, but the security itself is continuously replaced.

Warehouse receipts as a method of pledging inventory have many practical advantages from the standpoint of the lender over other inventory security devices. The Uniform Warehouse Receipts Act, adopted by every state, avoids problems and confusion of conflicting state laws; the property can be sold without reference to a bankruptcy court; acknowledgment before a notary and recordation are unnecessary; possession and control of the goods lies in a disinterested third party; and delivery of the receipt is sufficient to transfer title.[8] To the extent that a business is able to provide a lending institution with warehouse receipts rather than some other instrument of security, it may obtain credit when it might otherwise not be extended, or it may get more credit on the same amount of inventory.

On the other hand, lack of possession of the inventory may hamper operations, and the additional costs of warehousing may make the cost of funds high.

2. *Factor's lien.* A factor's lien is a method of pledging all the inventory in bulk to a financial institution as security for a loan. It can be used in only the 21 states that have enacted factor's lien statutes. It can be used to secure funds from any source and is not limited to "factors"—a financial institution to be described in greater detail under the subject of accounts receivable financing. However, it is most frequently employed by

[7] N. H. Jacoby and R. J. Saulnier, *Financing Inventory on Field Warehouse Receipts* (New York, National Bureau of Economic Research, 1944), p. 60.

[8] W. J. Schneider, *Field Warehousing as a Facility for Lending against Commodities* (New York, The Macmillan Company, 1941), pp. 4–5.

commercial finance companies and factors in connection with the financing of accounts receivable.

For a business needing to borrow and having to pledge inventory the factor's lien security device has the main advantage over pledging of warehouse receipts of enabling the business to retain possession of its inventory at all times. It may involve more record keeping, depending on the requirements in this regard imposed by the lender. It, too, can be used as the basis of a revolving credit.

The procedure of effecting a factor's lien is as follows: The borrower and lender enter an agreement setting forth the terms of the loan arrangement. The borrower indicates on a designation form all the merchandise to be liened. Where the pledge is to cover all the inventory, this form may be accompanied by a copy of the physical or book inventory records. In the case of a revolving credit, the borrower designates new merchandise as it comes into his possession or periodically, as weekly, if more practical. A notice of recording of the lien must be made at the appropriate public office. A collateral demand or time note is signed by the borrower, and the lender will insist that adequate insurance be carried, with the interest of the lender endorsed on the policies. Most states require the posting of a sign at the principal entrance to the business, setting forth the name of the company owning the inventory and the name of the factor designated as such.

Where the statute and loan agreement provide for it, the lien continues through the whole manufacturing process from raw materials to finished goods. When the goods are sold, the lien is released and if the goods are sold on credit, the account receivable takes the place of inventory as security. Or the account may be sold to the factor to supply cash for liquidation. The collections of the accounts provide the means of liquidating the debt. The borrowing firm will usually be required to furnish frequent reports showing new inventory acquired, goods sold, and balance of inventory on hand. If the inventory shows an increase, this would be the basis for a new advance; if a decrease, the basis for a payment.

The percentage of value that can be borrowed under a factor's lien would ordinarily be less for most businesses than by the use of warehouse receipts or other security devices. When all the inventory is made the basis of the lien, it will include goods in process, semifinished parts, or finished articles which would have little value if seized by the creditor. Then, too, there is considerably more hazard in this method of financing. A careful lender will spend more time and effort in checking the collateral and the business to make sure that all provisions of the loan agreement are adhered to. Because of the constant vigilance required the

costs of lending are increased, which is in turn reflected in the interest cost paid by the borrowing business.

3. *Trust receipt.* The trust receipt (Exhibit III) is a third type of security device used in inventory financing. It is used to lodge title to goods in the hands of the lender while the goods themselves are in possession of the business. Its use is limited by the Uniform Trust Receipts Act to transactions where goods, documents of title to goods, or instruments involved are to be held for sale or exchange or where the purpose is to manufacture or process the goods for eventual sale.[9] It is used, for example, by automobile dealers and distributors and dealers in major

EXHIBIT III

TRUST RECEIPT

Received, in trust from HARRIS TRUST AND SAVINGS BANK__________

____

____

which I/WE hereby undertake to hold for the account of said Bank and subject to its order and direction; and in the absence of any order or direction, for the special purpose only of __________

____

____

A security interest (as such term is defined in the Uniform Trust Receipts Act of the State of Illinois, being Sections 166 to 187, both inclusive, of Chapter 121½, Illinois Revised Statutes 1941) in the above described property, and every part thereof, remains in said Bank, and the rights of the Bank and the undersigned hereunder and in, under and to the property above described and the proceeds thereof shall be governed by said Act. Said Bank has and retains the right at any time to cancel this trust and take possession of said property or any part thereof.

I/WE agree to return the above described property to the said Bank or comply with its order or direction in relation thereto at any time upon its request prior to any sale or other disposition made pursuant to any permissive provision, if any, contained in the above statement of purposes. In the event of any sale or other disposition of said property by ME/US, if such sale or other disposition is permitted under the aforesaid statement of purposes, I/WE agree promptly to account for and deliver to the said Bank, in the form as received, any and all proceeds of such sale or other disposition, all such proceeds to be held in trust for said Bank until such accounting and delivery. In the event any such sale shall be on open account, it is further understood that the undersigned will mark all its books and records evidencing or relating to such account with the legend "Assigned to Harris Trust and Savings Bank", will deliver a copy of all invoices therefor to said Bank, and will forthwith account for and deliver to said Bank, in the form as received, any and all proceeds of such account.

Such return, compliance with the Bank's order or direction, or accounting for proceeds as aforesaid, as the case may be, shall in any event be made or done within ten_____days from the date hereof.

____

Dated____________________ ____________________

Form B-127

[9] The Uniform Trust Receipts Act has been adopted by 25 states. One exception to the above types of transactions is the provision that it may be used by brokers and dealers in stocks and bonds to gain temporary possession of the certificates for delivery to principals or to a depository or registrar.

household appliances for financing products held for sale and in preparing goods for shipment and transferring them from dock to vessel.

A trust receipt cannot be used by many manufacturing businesses because for the lending institution to be protected it must be able to identify clearly the article even though the nature of the item is being changed by the processing action.

As with the factor's lien the borrower has possession of the inventory, and therefore lenders are particularly cautious about to whom they grant credits under this device. Upon the resale of goods by the borrower the lien is released, and the borrower is obliged to hold the proceeds of the sale for the lender. A business receiving possession of goods under a trust receipt will be required to keep thorough records and will be subject to frequent check by the lender.

Trust receipt financing is initiated by the borrowing business's signing an agreement with a bank or finance company covering the manner of handling all trust receipt transactions. The lender then files a statement of trust receipt financing with the appropriate public official. There are a number of ways by which the business can gain possession of the goods in exchange for a trust receipt and note. For example, when a purchase is made, the seller may be instructed to make out the invoice and draw an order bill of lading upon the lending institution. The lender endorses the bill of lading over to the borrower in exchange for the trust receipt and note. These latter form the basis for the loan, the proceeds of which are paid directly by the lender writing out its check to the order of the seller.[10] A demand note is most often used because it is uncertain when the particular goods, such as an automobile, will be sold and the note paid.

4. *Chattel mortgage.* A chattel mortgage (Exhibit IV) on inventory may be given by a business as security for short-term credit, but it is infrequently used because of the cumbersome work of pledging and releasing an asset that is turned over several times during the course of a year. When the chattel mortgage is used to secure a short-term credit, the asset pledged is typically a fixed asset such as trucks, machines, or other equipment. In general, chattel mortgages are only suitable for fixed equipment items not intended for resale rather than for continuous and substantial inventory financing.

Their general inadequacy lies in their legal characteristics and the involved procedure that must be followed by the lender to make them effective. A chattel mortgage is similar to a real-estate mortgage except

[10] J. M. Johnston, Jr., "Trust Receipts and Factors Liens," *Bulletin of the Robert Morris Associates,* May, 1950, pp. 484–485.

Exhibit IV

Chattel Mortgage

CHATTEL MORTGAGE—Short Form—(Chicago) NO. 110 REVISED JULY 1935 Geo E Cole & Co Chicago LEGAL BLANKS

Know all Men by these Presents, That ________________

________________ of the City of Chicago, in the County of Cook and State of Illinois, hereinafter called "Mortgagor" in consideration of the sum of ________________

________________ DOLLARS,

paid by ________________
of the County of Cook and State of Illinois, hereinafter called "Mortgagee", the words "Mortgagor" and "Mortgagee" to be construed as plural whenever the number of parties so requires, the receipt whereof is hereby acknowledged, does hereby grant, sell, convey and confirm, unto the Mortgagee ________________
the following Goods and Chattels, to-wit:

____

TO HAVE AND TO HOLD all and singular the said Goods and Chattels, unto the Mortgagee, FOREVER. And the Mortgagor does hereby covenant to and with the Mortgagee that the Mortgagor owns and is lawfully possessed of the said Goods and Chattels, and the same are free from all Incumbrances, and the Mortgagor will warrant and defend the same to the Mortgagee against the lawful claims and demands of all persons, and will keep the said Goods and Chattels insured against loss by fire for the full insurable value thereof, in such companies as the holder of the note hereinafter mentioned, may direct, and make the loss, if any, payable to, and deposit the policies with the holder of said note as further security for the indebtedness hereinafter mentioned.

PROVIDED, NEVERTHELESS, That, if the Mortgagor, shall well and truly pay unto the Mortgagee ________________

____

then this mortgage to be void, otherwise to remain in full force and effect.

AND, PROVIDED, ALSO, That it shall be lawful for the Mortgagor to retain possession of the said Goods and Chattels, and at his own expense, to keep and use the same, until default shall be made in the payment of the said sum of money above specified, either in principal or interest, at the time or times, and in the manner hereinbefore stated. AND the said Mortgagor hereby covenants and agrees that in case default shall be made in the payment of the indebtedness aforesaid, or any part thereof, or the interest thereon, on the day or days respectively on which the same shall become due and payable, or if the Mortgagee shall feel insecure or unsafe, or shall fear diminution, removal or waste of said property, or if the Mortgagor shall sell or assign, or attempt to sell or assign, the said Goods and Chattels, or any interest therein, or shall fail or neglect to keep the said Goods and Chattels insured and to deposit the policies, as aforesaid, or if any Writ, or any Distress Warrant, shall be levied on said Goods and Chattels, or any part thereof, then, and in any or either of the aforesaid cases, all of said indebtedness both principal and interest, shall, at the option of the Mortgagee, without notice of said option to any one, become at once due and payable, and the Mortgagee, shall thereupon have the right to take immediate possession of said property, and for that purpose may pursue the same wherever it may be found, and may enter any of the premises of the Mortgagor with or without force or process of law, wherever the said Goods and Chattels may be, or be supposed to be, and search for the same, and, if found, take immediate possession of, and remove and sell, and dispose of the said property, or any part thereof, at public auction, to the highest bidder, after giving .... days' notice of the time, place and terms of sale, together with a description of the property to be sold, after giving such notice as may then be required by law, or at private sale, with or without notice, for cash or on credit, as the Mortgagee may elect, and the Mortgagee or any one or more of Mortgagees if there be more than one, may purchase at any such sale; and, out of the money arising from such sale, retain all costs and charges for pursuing, searching for, taking, removing, keeping, storing, advertising, and selling such Goods and Chattels, and all prior liens thereon, together with the amount due and unpaid upon said indebtedness, rendering the overplus, if any remain, unto the Mortgagor.

This instrument shall be binding on and inure to the benefit of the Mortgagor and Mortgagee and their respective heirs, executors, administrators and assigns.

WITNESS, The hand____and seal____of the said Mortgagor____, this________day of________________

in the year of our Lord one thousand nine hundred________________

Sealed and Delivered in Presence of

________________ ________________[Seal]

________________ ________________[Seal]

that it is on "personal" (movable) property as distinct from land and buildings. The pledged inventory must be described in the mortgage in great detail, and there can be no substitution of articles covered by the mortgage without the express permission of the mortgagee; therefore it is unsuitable for businesses that intend to resell the inventory pledged. Signatures must be sworn to before a notary and the document recorded. A chattel mortgage is merely a lien on the goods; legal proceedings are necessary to acquire title. Finally, there is the confusion brought about by different laws governing chattel mortgages in each of the states.

5. *Pawn of commodity.* Another possible but rarely used device is for the business to turn over to the lender physical possession of the commodity itself. From the borrower's standpoint this is generally unsatisfactory because the pledged inventory is not available for processing or display. From the lender's side it is not feasible because financial institutions do not have facilities for storing. Conceivably it could be used by jewelers and other businesses having inventory items of high value and small bulk.

Questions

1. Why are some loans secured and others unsecured? Is there any such thing as a completely unsecured loan?
2. Why would a business ever borrow on a secured basis?
3. What are the principal types of collateral protection that might be used in connection with short-term loans?
4. What are the principal considerations that determine the type of collateral used?
5. What are the customary sources for such secured loans? Are these sources competitive? In every case?
6. When should a business seriously think in terms of borrowing on the basis of its inventory?
7. What are the mechanics involved in borrowing on inventory? What are the special security documents used?
8. If the inventory serving as collateral is warehoused, how can the borrower recover the investment in the goods through sale in order to pay off the loan?
9. What are the special functions of a public warehouseman?
10. What is field warehousing? How is it performed?
11. How does borrowing on a factor's lien differ from the use of a warehouseman?
12. What considerations bear upon the amount to be loaned against the inventory pledged? Why is the chattel mortgage a difficult device to use in connection with inventory?

Chapter 17. SHORT-TERM CREDITS: SECURED BY RECEIVABLES OR OTHER ASSETS

This chapter continues the discussion of the various types of short-term secured loan that may be obtained by businessmen. All the general factors bearing on secured borrowing discussed in the preceding chapter apply to the types of loan discussed here.

Accounts Receivable Loans

The importance of credit sales in our economy was emphasized in Chapter 14 on "Trade Credit." Every credit sale gives rise to an asset, either an account receivable or a note receivable, on the books of the seller. Of the two, accounts receivable are by far the more important for most business establishments. Notes receivable arising from the sale of goods are important mainly in certain types of retail business such as automobile, furniture, household appliance, and jewelry and in a few manufacturing and wholesaling fields engaged in selling machinery, equipment, and fixtures.

Among the current assets of businesses, receivables rank second only to inventory and for many firms exceed the inventory in volume. It is only logical, then, that this asset be used as security for financing and, to the extent that receivables are short-term, for short-term credits. Because of the difference between accounts and notes receivable, one represented by open book accounts and the other by credit instruments, and the type of transactions in which they are used, considerable differences in methods of obtaining loans with them as security have developed. For this reason they are taken up separately.

Notification Financing of Accounts Receivable. For convenience of description, accounts receivable financing may be divided into two classes, notification and nonnotification, depending on whether or not the debtor whose account is sold or pledged is notified. The institutions financing receivables tend to divide along these lines too. Factors engage primarily in the notification type, while banks and commercial finance companies limit their receivable loans largely to the nonnotification type.[1]

[1] Factors primarily on a notification basis are known as "old-line factors" to distinguish them from factors and finance companies most of whose business is in receivables on a recourse basis or making other secured or unsecured loans. Most old-line factors make some of the more conventional types of loan, but they represent a small fraction of their total business.

A business chooses to use the services of a factor for one of two reasons, or both. First, a factor is a source of credit, and, second, it furnishes a credit investigation, collection, and guarantee service. Although a business is sometimes said to "borrow" or obtain credit from a factor, it is not borrowing. Factors buy the accounts receivable of their customers outright without any recourse to the selling firm should the purchaser of the goods sold default on payment. The factor takes the credit risk. This fact accounts, in turn, for the notification requirement. For the "borrowing" business it is much as though it made all its sales on a cash basis. Customers' accounts receivable of businesses using a factor do not appear on the balance sheet. The only receivable shown would be that amount of the proceeds of the sale left on deposit with the factor. Businesses *borrowing* on their accounts receivable, typically on a nonnotification basis, show the full amount of the pledged receivables among the assets with an off-setting note payable for the amount borrowed.

The second service of the factor is directly related to the first. Since it buys the receivables on a nonrecourse basis it insists on prior approval of the credit of the firms to which its customers are selling. Because in most cases businesses using a factor sell all their accounts receivable to it, there is no need for them to maintain credit and collection departments. They thus eliminate one business function that must be performed by all other firms selling on credit. The factors post detailed accounts receivable ledgers and in some cases prepare and mail the customers' invoices. Further discussion of the relative advantages and disadvantages of this form of credit will be more meaningful if postponed until the relationship between the business, factor, and trade debtor are more fully explained.

The credit is initiated by the business firm and factor signing a contract setting forth the terms and conditions under which the factor will agree to purchase the accounts receivable.[2] The firm then submits each sale to the factor for credit approval. When it is the practice of the business to ship goods from stock on hand, the factor sets up a line of credit for each customer within which the firm can make deliveries. When the goods are shipped, an invoice is made up and mailed in the regular manner but on it is printed a notation to the effect that the customer is to make payment directly to the factor. Copies of bills of lading and shipping receipts are forwarded to the factor. The latter are required as proof of shipment to prevent a business from making up and selling fictitious accounts.

[2] Much of the following has been drawn from H. R. Silverman, "Factoring as a Financing Device," *Harvard Business Review,* Vol. 27, September, 1949, pp. 594–611; and R. J. Saulnier and N. H. Jacoby, *Accounts Receivable Financing* (New York, National Bureau of Economic Research, 1943).

On receipt of notice of shipment the business is immediately credited with the amount of the net invoice minus the interest charge for the credit and the factor's commission. Interest at the rate of 6 per cent per annum (in most cases) is charged for funds advanced before the average due date of the receivables purchased. If funds are not withdrawn before the average due date, no interest charge is paid because there has been no financing, and if funds are left on deposit with the factor after the average due date, the firm is paid interest by the factor at a rate of 2 to 6 per cent.

Factors' commissions vary between 0.75 and 2 per cent of the net amount of receivables purchased. The commission is generally determined after taking into account (1) volume of sales, (2) terms of sale, (3) class of customer, (4) average size of invoice, and (5) competition. It constitutes the charge for credit checking, bad-debt losses, collection expense, and, in general, the costs of the factor's operations. As soon as the goods are shipped the borrowing firm may withdraw the amount credited to its account with the exception of a small percentage, 5 to 10 per cent, which is retained by the factor as a margin of protection against returns or allowances made on merchandise.

Factoring, like some types of inventory-secured loans, is a revolving type of credit. While the agreement or contract between the business and factor is typically for one year, factoring as a financing device is usually used for an indefinite period of time, often on a more or less permanent basis. The borrowing may be continuous or intermittent as needed—although the sale of receivables continues without interruption.

The particular advantages and disadvantages of factoring as a method of secured short-term financing cannot be easily compared with other means of secured financing because of the complicating factor of the credit investigation and guarantee service provided. Once the routine is put into operation it becomes a very *convenient* method of securing needed credit. It is exceedingly *flexible* in the matter of size. The amount available automatically increases or decreases with sales. The amount of credit can be geared closely to need. Even though all accounts are sold to the factor, the business need not withdraw funds immediately and pay interest on them. A business may be able to enlarge its sales because the factor may be more liberal in granting credit than the business itself, although the reverse is possible. The individual company cannot afford to keep as complete and up-to-date credit files. The factor spreads his risks over a much larger volume of business. Where a business has to stand its own bad-debt losses, it might limit credit to large purchasers merely because it did not want to concentrate so much of its risk in one

account. By factoring its accounts the limit of credit sales to a single customer can be raised with safety.

The use of a factor substitutes a variable cost (measured by the factor's commission) for the fixed or semivariable cost of maintaining a credit and collection department. The break-even point of the firm may thereby be lowered. However, a factor may be unwilling to take business unless a certain minimum volume of accounts is offered. As compared with bank borrowing, there is no compensating balance requirement. That portion of a business's credit balance with the factor which is restricted is low and is tied to the firm's experience with returns and allowances. Finally, the management is relieved of the credit and collection problem entirely and can devote its attention to the primary function of the business, merchandising, manufacturing, or whatever it may be.

The possible disadvantages are those of cost and restriction on sales. The cost factor may be divided into a consideration of the cost of credit measured by the 6 per cent per annum rate of discount on the receivables sold and the cost of the credit service measured by the factor's commission. The former may or may not be above rates that would be charged by other lending institutions. The charge for the credit service may be higher or lower than if the business assumed its own credit risks and undertook collections.

If credit standards of the factor were quite strict, this would tend to restrict sales. Possibly the profit on the sales lost would more than offset the additional credit costs involved arising from the maintenance of a credit department and bad-debt losses. As will be explained in more detail in the following section on nonnotification financing, customers of a firm using a factor might regard the instructions on the invoice to make remittance to the factor a sign of weakness and thus restrict or divert purchases to other suppliers.

Factoring is not widely used except in the textile industry. It is estimated that nine-tenths of the accounts handled by factors in 1948 were concentrated in this field while the other one-tenth was principally in the shoe, furniture, equipment, and appliance trades.[3] However, its rapid growth as compared with some of the other forms of short-term credit is apparent from Table 1. Its use in the textile field is a matter of historical development dating back to early colonial times. It is not widely used by other firms because of unfamiliarity and because one or more of the disadvantages cited above appear to outweigh the advantages.

The notification type of accounts receivable financing is sometimes engaged in by bank and commercial finance companies, the principal lenders under the nonnotification type of financing. However, these

[3] Silverman, *op. cit.*, pp. 595–598.

Table 1

Estimated Volume of Accounts Receivable Factored, 1930 to 1951

(In millions of dollars)

Year	*Accounts Receivable*
1930	$ 505
1935	726
1940	790
1945	1,565
1947	2,430
1949	2,000
1950	2,500
1951	3,000 [a]

[a] Annual rate in first half of year.
Source: *Barron's Financial Weekly,* Oct. 29, 1951, p. 13.

institutions do not assume the credit risk function of factors, and so notification financing for them, in many respects, is more like their more usual operation in the nonnotification field. The notification aspect of their lending will be commented upon briefly in the following section.

Nonnotification Financing of Accounts Receivable. Nonnotification accounts receivable financing involves the pledge of customers' accounts as security for a loan without the customers knowing that their accounts have been so pledged. This type of receivables financing is more like other types of secured financing than the notification type. There is no outright sale of the receivables on a nonrecourse basis as there is to a factor. The borrowing firm bears all bad-debt losses and credit expenses. The accounts are only a pledged asset which can be seized by the lender in case of default on the loan.

This means of financing is employed by businesses which, out of choice, or because of necessity, have to pledge receivables and at the same time do not want the credit services of a factor. Nonnotification financing is usually an expensive way of obtaining funds and is therefore employed most often when no other means of borrowing is available. There is apparently some feeling among businessmen outside of the textile industry that the pledging of receivables to secure a debt is a sign of weakness. Businesses that have to pledge their accounts therefore prefer not to let their debtors know that their accounts have been assigned as security for a debt.

The methods of borrowing on a nonnotification basis are far from standardized. The particular arrangement that is worked out between a lender and a borrowing business will depend on the credit standing of

the borrower, the credit standing of the debtors whose accounts are to be assigned, the number and size of the accounts, and a number of other factors. The following paragraphs will point out some of the principal methods followed in working out nonnotification borrowing arrangements, but the reader should bear in mind that there are many different details of procedure that cannot be treated in this limited discussion.

There are two general systems by which a business may secure funds on a nonnotification basis. First, and most common, is the assignment of accounts receivable to the lender and the execution of a note. Through the assignment the lender acquires the same right to bring action for the debt that the assignor possesses. The second method is to "sell" the accounts to the lender, and under this method because the accounts have been "sold" there is no need to execute the customary promissory note. The mechanics of operation of the two systems are very similar except for the difference in the presence or absence of a note and a difference in marking the accounts on the books of the borrowing business. In the case of the assignment the duplicate copies of the invoices and the accounts on the receivables ledger are marked "assigned to," and in the purchase arrangement they are marked "sold to."

A bank in lending on accounts receivable undertakes much the same type of credit investigation that it does in making an unsecured loan. In addition it makes an intensive investigation of the borrower's accounting records and the pledged accounts. Finance companies typically put greater reliance on the security and more careful auditing of the borrower's accounts than do banks.[4] Because lenders make frequent audits of borrower's books, the preliminary investigation will examine the adequacy of the bookkeeping system to ensure that the accounts receivable ledger can be easily checked to verify outstanding invoices and that the cash receipts journal will show disposition of collections. A check is made of the applicant's past bad-debt and returns and allowance experience, and the present outstanding accounts are "aged" (see Chapter 6) as it is these outstanding accounts which are the basis of the initial loan. The individual accounts are checked against the Dun and Bradstreet reference book or other credit sources to determine their ratings. Periodic checking of the ratings of all accounts plus periodic aging during the term of the loan arrangement provides the lender with a measure of the trend of the risks undertaken.

The borrowing is initiated by the execution of a loan agreement which includes all the terms under which funds will be advanced—the percentage of margin to be maintained, the rate of interest and service charges

[4] M. J. Drake, "Accounts Receivable Financing," *Bulletin of the Robert Morris Associates*, July, 1947, p. 44.

if they are stated separately, the agreement to replace old accounts and reimbursement for returned goods and allowances, conditions under which direct notification of the customer will take place, evidences of delivery, records to be kept and furnished by borrower, etc. The percentage loaned to accounts pledged varies from 60 to 90 per cent, depending on the quality of the accounts, the credit standing of the borrower, the cash discount offered, the borrower's past experience with bad debts and returns and allowances, whether credit insurance is carried or not, and the profit margin. Ordinarily the margin required will be of such size that the borrower does not obtain any of its profit from the sale until final collection of the account.

The interest and service charges are handled in a variety of ways. Banks typically state these charges separately while finance companies commonly charge a single over-all rate. The interest rate charged by banks on the daily outstanding loan balance is based on the credit standing of both borrower and its debtors and the size of loan. The service charge may be stated as a per annum rate on the outstanding loan balance, or it may be based on the number of invoices handled. It is affected by the size and number of the invoices pledged, number of accounts represented, the turnover of payments, the size of the loan balance, and any other factors that add to the costs of administering the loan. The charge of the finance company may be made as a discount on the face of the individual invoices assigned, but it is usually taken as a flat interest charge based on the average daily balance of either the cash advanced or the face value of invoices assigned.[5]

The provision for replacement of overdue accounts is designed to maintain the quality of the security behind the loan. The usual requirement is that the borrower must either buy back or replace with current accounts any invoices held by the lender that are more than 30 days overdue. The provision in the loan agreement that the borrower must submit verification that merchandise described in each invoice has been delivered to the buyer is to prevent the drawing of fictitious invoices. These evidences of delivery may be bills of lading, signed truckers' delivery receipts, or any other certificate signed by the buyer or his agent.

The note may be either a demand or a time note, and where a business borrows over an extended period of time by pledging separate groups of invoices, several notes may be outstanding at the same time, or each new note can be used to pay off the old note so that there is only one outstanding. The particular arrangement used will depend on the circumstances. A demand note is usually more convenient.

[5] R. W. Burman, "Practical Aspects of Inventory and Receivables Financing," *Law and Contemporary Problems,* Vol. 13, Autumn, 1948, p. 560.

A separate assignment form (Exhibit I) listing the individual invoices pledged is signed by the borrower in addition to the note for each separate borrowing transaction. The assignment or the loan agreement contains a provision to the effect that the borrower is acting merely as a trustee of the lender in the collection of the assigned accounts and that he will immediately forward the original checks received from all accounts that are assigned. These may be applied to the total of the loan, allocated to specific notes, if time notes are used, or deposited in a collection account which is applied to the loan periodically. This latter method tends to increase the cost because the borrower is paying on the outstanding loan balance. In some instances, the lender returns the margin received from each group of collections, while in others the entire amount of the collection is applied to the loan.

Lenders must go to considerable effort properly to administer non-notification accounts receivable loans. As a result their costs are high, and correspondingly their charges are high. They are concerned first with getting a valid assignment of the accounts so that they will have first claim on them in case of bankruptcy. State laws differ on means of perfecting the assignment. First are the so-called "validation statutes," whereby the mere assignment with a legal instrument is sufficient to convey title, second are the recordation statutes, which require recordation with local authorities of a notice of intent to assign accounts receivable, and third are the bookmarking statutes, which require marking of the borrower's ledger pages to indicate assignment of any individual receivable.[6]

Second, the lender must ensure that the accounts he lends against are legitimate. The requirement of evidence of delivery with each invoice is designed to protect the lender on this point. Finally, it is essential for the lender at all times to receive original debtors' checks; it assures valid collection of receivables, it affords further proof of the original genuineness of the account, and it precludes any commingling of funds by the borrower, which in the event of difficulty might set aside title of the assignee to the receivables as against a trustee in bankruptcy or intervening creditors. The original checks as received by the borrower are transmitted to the lender and summarized on a form (Exhibit II).

In the case of borrowers that are quite weak financially the lender may find it advisable to notify the debtors and have the payments on the accounts come directly to the lending institution. Provision may be made in the loan agreement for notification if the borrower defaults on any of its terms.

[6] *Ibid.*, p. 557.

Exhibit I

ASSIGNMENT AND SCHEDULE OF ACCOUNTS RECEIVABLE TO THE COSMOPOLITAN NATIONAL BANK OF CHICAGO

Schedule Number__________ Sheet Number__________

DATE OF INVOICE	No. of Invoice (ARRANGE NUMERICALLY)	NAME AND ADDRESS OF DEBTOR	DUE DATE	AMT. OF INVOICE	DATE PAID
		TOTAL			

This agreement made and entered into at Chicago, Illinois, between the undersigned as first party and THE COSMOPOLITAN NATIONAL BANK OF CHICAGO (hereinafter referred to as the Bank) as second party, WITNESSETH:

For value received and as collateral security for a loan to the first party this day made by the Bank, the first party bereby sells, assigns, transfers, and sets over to the Bank absolutely and in their entirety the foregoing accounts; and for the purpose of inducing said Bank to make, renew or extend such loan or loans to the undersigned and to better secure the payment thereof, and of any present or future indebtedness of the first party to the Bank, the said first party represents and warrants: that all of said accounts are genuine and collectible; that the persons, firms or corporations named above are indebted to the first party for merchandise sold and delivered by the first party in the sums set opposite the respective names of each debtor; that each of said accounts is not subject to any dispute, defense, setoff or counterclaim.

THE UNDERSIGNED AGREES THAT THE REPRESENTATIONS, WARRANTIES, AGREEMENTS AND CONDITIONS APPEARING ON THE REVERSE SIDE HEREOF HAVE BEEN CAREFULLY READ AND ARE HEREBY EXPRESSLY MADE A PART OF THIS AGREEMENT THE SAME AS IF RECITED OVER THE SIGNATURE OF THE UNDERSIGNED.

In Witness whereof the first party has caused this agreement to be executed and delivered this__________day of__________, 19____.

ACCEPTED:
THE COSMOPOLITAN NATIONAL BANK OF CHICAGO
A NATIONAL BANKING ASSOCIATION.

____________________(SEAL)
(first party)

By____________________

By____________________
Vice President, Secretary, Treasurer

EXHIBIT I (*Continued*)

REPRESENTATIONS, WARRANTIES, AGREEMENTS AND CONDITIONS

For value received and as collateral security for a loan made, to be made, renewed or extended to the first party by the Bank and to better secure the payment thereof, and of any present or future indebtedness of the first party to the Bank, whenever or however created, arising, evidenced or acquired, whether direct or contingent, or arising by way of indorsement, guarantee or otherwise, the first party hereby sells, assigns, transfers and sets over unto the Bank, all of the right, title and interest of the first party in and to the accounts receivable, evidences of indebtedness and other obligations (herein collectively termed accounts) listed on the reverse side hereof, evidencing indebtedness owing to the first party and unpaid by the debtors named therein and appearing on the reverse side hereof, together with any securities or guaranties thereon, including all moneys due and to become due on the same, the title to the merchandise represented thereby, and the title to any new account and merchandise created through the resale, modification or exchange of said merchandise, including all moneys owing thereon. If any merchandise of any account hereby assigned is returned by any debtor the first party agrees to deliver to the Bank in lieu of said account, at the Bank's sole option, cash in an amount equivalent to said account, other accounts receivable, or the merchandise returned.

First party represents and warrants: that all of the said accounts are genuine and collectible; that each of said accounts represents merchandise sold and delivered to the purchaser at the address and in the gross amount set forth on the reverse side hereof and is not subject to any dispute, defense, setoff or counterclaim; that no other assignment of any of said accounts and/or moneys have heretofore or will hereafter be made; that the first party is solvent and each debtor named in each account is solvent; first party unconditionally guarantees the prompt payment in full of said accounts; first party represents that at the time of the assignment of said accounts it has made entries on its books indicating said assignment to the Bank. The Bank or any of its representatives is hereby given the right and power at any time to inspect, check, make extracts from and audit first party's books, records, and files, and to otherwise verify all accounts acquired.

The first party agrees to cooperate fully in enabling the Bank to collect the accounts assigned and expressly authorizes the Bank to ask for, demand, institute and maintain suits for, receive, compound, compromise and give acquittances for any and all sums which are now or may hereafter become due upon said accounts, and to enforce payment thereof in its own name or in the name of the first party. The first party hereby irrevocably constitutes and appoints any officer of the Bank as its lawful attorney to receive, receipt for and open all mail addressed to the first party, with full power to endorse the name of the first party upon any notes, checks or any other evidence of payment of anything assigned hereunder; and to do and perform and cause to be done and performed any act or thing necessary to carry out the purposes and intent hereof. Said power herein granted shall not be revoked by the first party until the Bank has been paid all moneys due it, including all expenses as herein mentioned. The Bank may appoint an agent, who may be but need not be an officer or employee of the first party, to receive, collect and transmit directly to the Bank, any and all sums that shall become payable on any of said accounts. Such agent shall receive such remittances solely for the Bank and shall at all times be subject to its exclusive orders with relation thereto. The faithful conduct and performance of such agent in the receipt, collection and transmittal of such remittances to the Bank is hereby guaranteed by the first party and the first party hereby expressly relieves the Bank from any responsibility or liability for any misconduct by such agent.

Should the first party receive remittances on any of said accounts it agrees to deliver forthwith in its original form to the Bank, all moneys, checks, money orders, notes and other evidences of payment received either in full payment of or on account of any of said accounts. First party agrees not to comingle any of such moneys, checks, money orders, notes, or other evidences of payment which may be so received with any of the first party's funds or other property but will hold the same separate and apart in trust for the Bank until delivery thereof is made to the Bank. All sums of money which are proceeds of said accounts or said security, collected or otherwise received by the first party or the Bank may be deposited in a special collateral account in the Bank in the name of the first party and shall be held by the Bank as collateral security for the payment of any and all indebtedness of the first party to the Bank. The Bank may at any time and from time to time, in its sole discretion, apply any part of the credit balance in said special account to the payment of any of the obligations to the Bank whether or not the same be then due.

If a Receiver is appointed for the first party or if the first party is involved in financial difficulties, or is adjudged bankrupt or requests an extension from creditors, or if the Bank feels insecure or unsafe, or in the event of a breach of any representation or warranty herein or heretofore made, whether such breach arises through the act of the first party or of others, the Bank, may at its sole option (without notice to the first party) avail itself of any action it deems necessary to forthwith recover all moneys due or to become due to it hereunder, and in addition, all attorneys fees, court costs, auditing expenses, and all other expenses incurred in and about the checking, handling and collecting of said accounts assigned herein.

All rights and remedies of the Bank hereunder are cumulative and not in lieu of, but in addition to any other rights and remedies which the Bank may have under the provisions of any promissory note or agreement of the first party; and no failure or delay to enforce or exercise any of the same shall operate as a release thereof. Notice of presentation for payment or non-payment, of dishonor, notice to debtors of this assignment, and all formalities legally required to charge the first party with liability hereunder are expressly waived by the first party.

This agreement and all of its provisions on both sides hereof shall enure to and become binding upon the heirs, executors, administrators, successors and assigns of the respective parties hereto.

Exhibit II

The Cosmopolitan National Bank of Chicago

COLLECTION REPORT ON ASSIGNED ACCOUNTS RECEIVABLE

No.__________

Accompanying this report are the original remittances (itemized below) received on accounts or other receivables assigned to and including________________, 19____. You may credit said remittances to our commercial account and apply the attached check for $__________on our indebtedness.

INVOICE DATE	DEBTOR	AMOUNT OF DEBTOR'S REMITTANCE	ASSIGNED		REMARKS
			SCHEDULE NO.	AMOUNT	
	TOTALS				

We have made no collections other than those listed above since our last report.
Nothing has occurred to impair the validity or reduce the security of the receivables assigned to you.

____

1104 S-H Co

By____________________

The lender usually maintains his own records on each debtor showing the debtor's credit rating, any credit limits assigned, the date and amount of each invoice purchased, and the ultimate disposition of each invoice, whether by payment or repurchase. These records must be reconciled with those of the borrower at frequent intervals. Where all a business's

accounts are assigned, the individual invoice-by-invoice recording is sometimes dispensed with. Occasionally the lender will place his own representative or custodian on the premises of the borrower on a permanent basis. The representative may be originally an employee of the borrower who is transferred to the payroll of the lender and bonded.

Nonnotification accounts receivable financing, like factoring, borrowing on field warehouse receipts, and factor's liens, is a revolving type of credit. Once the arrangement is set up, borrowing by this method can continue indefinitely. A business would ordinarily shift to some other cheaper form of financing as soon as its credit would warrant it. It is an exceedingly flexible type of credit. The amounts borrowed are rooted to sales, are in direct proportion to needs, and may be increased or decreased daily according to requirements. From the borrower's standpoint the advances are self-liquidating; he need not concern himself with repayment problems. Except for the margin requirement it is as though the borrower had made a cash sale.

Installment Receivable Loans

Among two large classes of businesses, credit sales give rise to notes receivable rather than accounts receivable. The first is retail stores, dealing primarily in consumer durable goods, such as automobiles, appliances, and furniture, and the second is manufacturers and distributors of equipment sold to other business firms for their own use which is paid for in installments. Financing of commercial and industrial equipment which typically involves intermediate-term financing is the subject of the following chapter. Borrowing on the security of retail consumers' installment notes is also frequently of more than one year in duration, particularly when the notes arise in the purchase of items of large dollar value, such as automobiles and refrigerators. However, because many of the notes have a shorter maturity than one year, and because most retailers generally class all such notes receivable, no matter what the maturity, as current assets, this type of secured borrowing is considered here rather than in the following chapter.

A retail store selling on credit is not supplying "trade" credit as is the case with manufacturer and wholesaler credit sales. Since the retailer's sales are to consumers, such sales constitute "consumer" credit. Such credits are paid from the earnings of consumers rather than the resale of merchandise. Retail credit sales fall into two classes. The first, and most important, is the "open book" sales—a charge account—with a bill rendered to the customer each month. The second is the installment sale, in which the customer makes a down payment and signs a note promising to repay the unpaid balance in equal monthly installments.

Retailers' accounts receivable (charge accounts) are not an asset that can ordinarily be used as security for a loan as can the accounts of other types of business. The principal reasons are: (1) The customer has made no down payment. The charge account represents 100 per cent of the value of the goods purchased. (2) The average account is so small that it would take a large number to secure a loan of any size to the retailer. The cost of checking the credit of these numerous customers would be so great that it would necessitate a high interest charge to cover this cost. (3) Since these accounts are collected monthly, there would be a tremendous bookkeeping job of crediting the proceeds toward the reduction of the loan balance or, if the loan was not to be reduced, substituting new accounts for those paid off. This again would be costly.

The installment notes receivable are more acceptable as security to sales finance companies and commercial banks, who are the principal lenders. The reasons are: (1) The customer signs a promissory note, which he feels is more binding than a charge account arrangement, where he has signed nothing. (2) The average receivable is much larger. (3) The customer usually takes possession of his purchase under a conditional sales contract which provides that he does not obtain title until the last payment on the note is made. It is thus easier for the lender to repossess the article. (4) A down payment is generally made, which means that the consumer has an equity in the article which he would lose if he defaulted on the note. (5) Most of the commodities purchased on the installment plan are "durable" goods, which have a higher resale value than do "soft" goods, such as clothing, food, etc., which accounts for a large per cent of the charge sales.

Practice varies among different lines of trade and among individual dealers in a particular line as to the extent that customers' installment notes are used as security for a credit advance. The percentage of installment credit sales, charge account sales, and cash sales for leading lines of retail business are shown for 1951 in Table 2.

Furniture, household appliances, jewelry, automobile, and automobile tire and accessory stores having a large percentage of installment sales might logically use their customers' notes as security. These notes receivable are a large item on the balance sheets of these stores and in many cases would be preferred as security over the inventory by lenders. In some cases the dealers first pledge their inventory and use their customers' notes for additional financing.

When the dealer does not finance his own credit sales but "sells" his receivables to a financial institution, the three parties in the transaction

are bound together by several contracts or agreements.[7] Ordinarily the retailer sells all his contracts to a single sales finance company or bank under an agreement, or "plan." The agreement may include both a wholesale and a retail plan. The former covers the financing of the dealer's inventory, while the latter covers the conditions and methods of lending upon individual consumer contracts.

TABLE 2

RETAIL SALES BY TYPE OF TRANSACTION AND KIND OF BUSINESS, 1951 [a]

Kind of business	Percentage of total sales		
	Cash	Charge account	Installment
Department stores [b]	53	29	18
Men's clothing stores	43	49	8
Women's apparel stores	50	46	4
Furniture stores	18	19	63
Household-appliance stores	27	24	49
Jewelry stores	31	17	52
Hardware stores	44	49	7
Automobile dealers	48	14	38
Auto-tire and accessory stores	35	35	30

[a] These data were gathered from credit-granting stores only. Therefore the proportion of total sales transacted on credit is larger than it would be if all stores were included. In most of these fields, however, the number of stores selling only for cash would be a very small proportion of all stores.

[b] Includes mail order.

SOURCE: Retail Credit Survey—1951, *Federal Reserve Bulletin*, July, 1952, p. 645.

The prospective credit customer ordinarily signs three documents, (1) a promissory note for the amount of the unpaid balance, (2) a conditional sales contract, chattel mortgage, or bailment lease, and (3) a purchaser's statement.[8] The promissory note is evidence of the debt; the conditional sales contract, chattel mortgage, or bailment lease is the security for the debt; and the purchaser's statement is the customer's credit application. The application describes the article being purchased and terms of sale

[7] Much of the following material was drawn from W. C. Plummer and Ralph A. Young, *Sales Finance Companies and Their Credit Practices* (New York; National Bureau of Economic Research, 1940).

[8] In some cases the note and security document are combined in one contract.

and contains data on the customer's financial status and any credit references. The credit investigation is made by the dealer himself, or the information in the customer's statement is telephoned to the finance company or bank, which makes the investigation. All necessary checking can usually be accomplished within a few hours and possession of the purchased article handed over to the customer.

The retailer now endorses the note or contract, hands it to the finance company or bank, and is paid in cash the face amount less the finance charge and insurance premium, if the latter is present and is to be placed by the financing institution. The dealer is now out of the picture unless repossession for failure to meet payments becomes necessary. The customer makes his monthly payments directly to the financial institution.

The liability of the dealer in event of default by the consumer depends on the agreement between the dealer and the finance company or bank. If this agreement calls for purchase of the consumer contracts on a nonrecourse basis, no further liability attaches to the dealer; if on a full recourse basis, the dealer is responsible for the full amount of the unpaid balance; or if, as is more usually the case in automobile financing, there is a modified recourse arrangement, the dealer's liability is limited. The finance company or bank may bear the cost of major repairs on repossessed articles, it may bear the entire loss when the article cannot be repossessed within a given time, it may pay the costs of repossession, and in some cases the dealer gets the benefit of a "reserve" set up by the finance company out of its collections provided that allowance is not used up by bad-debt losses.

The particular arrangement worked out between retailer and financial institution depends on the credit standing of the retailer, the downpayment and maturity provisions of his installment sales, and the competitive situation between the financial agencies themselves. When there is a wholesale plan in effect along with the retail plan, the finance company or bank is particularly interested in the credit standing of the dealer, and where any kind of repurchase agreement with recourse has been consummated, the financial ability of the dealer to make good losses on repossessions is of major concern to the lender. The payment record on installment contracts purchased previously influences the financial terms imposed at the time the sale is made. With a thorough credit investigation of customers and conservative terms, the financing agency is more willing to purchase contracts on a nonrecourse or limited recourse basis.

The calculation of the cost of this type of financing is somewhat different from that for other forms of business borrowing. The cost is measured by the additional income the retailer gives up by not financing his credit sales himself. Most retailers have two different prices, a cash price and a

time payment price, for articles sold "on time." The higher time payment price is presumably to cover the additional costs incurred by the retailer in making and administering the credit sales. However, in many cases the addition to the cash price is not closely related to the additional costs incurred. It may be less than or more than the additional costs. To the extent that it is more than the expenses incurred, the retailer makes a higher profit on his credit sales than on his cash sales, and vice versa.

Properly calculated, the costs of selling on credit should include a charge for the funds the retailer ties up in receivables. If a particular dealer in setting his time payment price includes a high charge for funds used, say 10 to 15 per cent, it may well be that he is making a higher return on funds used in his customer financing than on funds used in the rest of his operation. In such a case, it would obviously be more to the operator's advantage to carry his notes receivable than to sell them to a financial institution.

However, the commonest reason for selling customer contracts is that the business does not have enough funds to finance them. When the notes are sold to a finance company or bank, the installment sale is equivalent to a cash sale for the dealer.

The finance charge is typically computed as a per cent of the original face value of the note. Thus the typical *nominal* charge of 6 per cent does not appear high, but the *effective* rate is approximately double the nominal rate because the average balance outstanding over the life of the loan is about one-half of the original balance.

Stocks, Bonds, and Mortgages

Stocks and bonds, which are carried as Investments or Marketable Securities, are especially suitable as collateral for loans since the cost of handling them by the lender is slight and there is little inconvenience to the borrower. In November, 1946, 11.3 per cent by number and 15.5 per cent by dollar amount of all secured business loans of member banks were secured by stocks, bonds, and mortgages as shown in Table 3.

This type of loan is not usually available to small businesses because of the lack of investments or marketable securities among their assets. The pledge of this type of asset does not impede in any way the normal operation of the business as might be the case with the pledge of inventory or receivables. Stock certificates and bonds are not used in the day-to-day operations.

Possession of the instrument is given up to the lender. In the case of a stock certificate or registered bond, the borrower endorses the reverse side in blank or gives the lender a separate power of attorney form. In

case of default the lender need only fill in its own name on the back of the certificate or the power of attorney form and pass the certificate on to a broker for sale for its account. The lender reimburses itself for the amount of the loan and any unpaid interest and remits the balance, if any, to the borrower. Since coupon bonds are fully negotiable, no signing of the certificates or other forms by the borrower is necessary. The lender merely takes possession and gives the borrower a receipt for such bonds.

TABLE 3

BUSINESS LOANS OF COMMERCIAL BANKS SECURED BY STOCKS, BONDS, MORTGAGES, ETC., NOVEMBER, 1946

Item	Percentage of secured loans	
	Number of loans	Dollars loaned
U.S. government securities	4.1	6.3
Other bonds	0.5	1.6
Listed stocks	4.5	5.1
Unlisted stocks	1.6	3.3
Assignment of deed of trust or mortgage on property not owned by the borrower	0.6	2.2
Total	11.3	18.5

SOURCE: Tynan Smith, "Security Pledged on Member Bank Loans to Business," *Federa Reserve Bulletin,* June, 1947, p. 665.

Life Insurance Policies

The assignment of life insurance policies on the lives of owners, officers, and directors accounted for 5.3 per cent by number of all secured loans of member banks in November, 1946.[9] These loans were, however, on the average small since they accounted for only 2.6 per cent of the dollar volume of loans outstanding on this date.

Most forms of life insurance policies have a cash surrender value. This is a definite sum stated in the policy which increases each year. As a part of the life insurance contract, the insurance company promises to pay to the policyholder this cash surrender value at any time he may elect. However, such surrender terminates the policy. The company will also

[9] Tynan Smith, "Security Pledged on Member Bank Loans to Business," *Federal Reserve Bulletin,* June, 1947.

lend the policyholder the amount of the cash surrender value without canceling the policy. The cash surrender value is pledged as the security for the loan in borrowing from either the insurance company or some other financial institution. Insurance companies typically charge interest rates of 5 or 6 per cent, sometimes less, especially on large loans. The reason for borrowing from a bank or other source is to obtain the advantage of a lower interest rate.

Banks and other lenders have little hesitancy in lending on this security. The financial record of life insurance companies has been excellent. There is therefore little chance of loss from failure of the insurance company to perform.

Insurance policies are pledged by the signing of an assignment form similar to that shown in Exhibit III. The insurance company must be given notice of the assignment. The assignment gives the lender sole right to collect the net proceeds of the policy from the insurance company if it matures or the insured dies before the loan is paid or to receive the surrender value of the policy at any time. Should the lender find it necessary to exercise any of these options, he would remit any balance over the amount of the loan and unpaid interest to the insured or to his beneficiary if the insured were not living.

From the standpoint of the business a loan secured by an assignment of a life insurance policy is advantageous in that it usually will bear a low rate of interest to the extent that it is secured by cash surrender values, and it does not involve the tying up or otherwise hindering the use of assets used in the normal operations of the concern. It is possible, however, that most of the policies pledged on these loans are taken out to protect the families of the business's owners and officers, and not to protect the business against loss of its key personnel. That being the case, the pledge of such policies has the effect of endangering the individual's personal estate.[10] For this reason it is likely that most businessmen would prefer to pledge business assets, if suitable to the lender, even though the cost and inconvenience may be more. These loans are typically rather limited in size because of the nature of the asset pledged. The cash surrender value in the average policy is small compared with borrowing

[10] When a stockholder in a corporation assigns an insurance policy on his life that names someone other than the business or his business associates as the beneficiary, he is relinquishing in part the limited liability which he obtains in the corporate form of organization. A sole proprietor or partner assigning such a policy opens himself to even greater risk than he normally has. Even though the personal assets of the proprietors and partners are available to satisfy claims of creditors, subject to the rules of marshaling, such unlimited liability does not extend to cash surrender value of their personal life insurance policies unless the insured reserves the right to change the beneficiary of the policy.

Exhibit III

Form No. 10—LIFE INSURANCE ASSIGNMENT

FORM APPROVED BY
BANK MANAGEMENT COMMISSION
AMERICAN BANKERS ASSOCIATION

ASSIGNMENT OF LIFE INSURANCE POLICY AS COLLATERAL

A. For Value Received the undersigned hereby assign, transfer and set over to HARRIS TRUST AND SAVINGS BANK of CHICAGO, ILLINOIS its successors and assigns, (herein called the "Assignee") Policy No. ______ issued by the ______ (herein called the "Insurer") and any supplementary contracts issued in connection therewith (said policy and contracts being herein called the "Policy"), upon the life of ______ of ______ and all claims, options, privileges, rights, title and interest therein and thereunder (except as provided in Paragraph C hereof), subject to all the terms and conditions of the Policy and to all superior liens, if any, which the Insurer may have against the Policy. The undersigned by this instrument jointly and severally agree and the Assignee by the acceptance of this assignment agrees to the conditions and provisions herein set forth.

B. It is expressly agreed that, without detracting from the generality of the foregoing, the following specific rights are included in this assignment and pass by virtue hereof:
1. The sole right to collect from the Insurer the net proceeds of the Policy when it becomes a claim by death or maturity;
2. The sole right to surrender the Policy and receive the surrender value thereof at any time provided by the terms of the Policy and at such other times as the Insurer may allow;
3. The sole right to obtain one or more loans or advances on the Policy, either from the Insurer or, at any time, from other persons, and to pledge or assign the Policy as security for such loans or advances;
4. The sole right to collect and receive all distributions or shares of surplus, dividend deposits or additions to the Policy now or hereafter made or apportioned thereto, and to exercise any and all options contained in the Policy with respect thereto; provided, that unless and until the Assignee shall notify the Insurer in writing to the contrary, the distributions or shares of surplus, dividend deposits and additions shall continue on the plan in force at the time of this assignment; and
5. The sole right to exercise all nonforfeiture rights permitted by the terms of the Policy or allowed by the Insurer and to receive all benefits and advantages derived therefrom.

C. It is expressly agreed that the following specific rights, so long as the Policy has not been surrendered, are reserved and excluded from this assignment and do not pass by virtue hereof:
1. The right to collect from the Insurer any disability benefit payable in cash that does not reduce the amount of insurance;
2. The right to designate and change the beneficiary;
3. The right to elect any optional mode of settlement permitted by the Policy or allowed by the Insurer;
but the reservation of these rights shall in no way impair the right of the Assignee to surrender the Policy completely with all its incidents or impair any other right of the Assignee hereunder, and any designation or change of beneficiary or election of a mode of settlement shall be made subject to this assignment and to the rights of the Assignee hereunder.

D. This assignment is made and the Policy is to be held as collateral security for any and all liabilities of the undersigned, or any of them, to the Assignee, either now existing or that may hereafter arise in the ordinary course of business between any of the undersigned and the Assignee (all of which liabilities secured or to become secured are herein called "Liabilities").

E. The Assignee covenants and agrees with the undersigned as follows:
1. That any balance of sums received hereunder from the Insurer remaining after payment of the then existing Liabilities, matured or unmatured, shall be paid by the Assignee to the persons entitled thereto under the terms of the Policy had this assignment not been executed;
2. That the Assignee will not exercise either the right to surrender the Policy or (except for the purpose of paying premiums) the right to obtain policy loans from the Insurer, until there has been default in any of the Liabilities or a failure to pay any premium when due, nor until twenty days after the Assignee shall have mailed, by first-class mail, to the undersigned at the addresses last supplied in writing to the Assignee specifically referring to this assignment, notice of intention to exercise such right; and
3. That the Assignee will upon request forward without unreasonable delay to the Insurer the Policy for endorsement of any designation or change of beneficiary or any election of an optional mode of settlement.

F. The Insurer is hereby authorized to recognize the Assignee's claims to rights hereunder without investigating the reason for any action taken by the Assignee, or the validity or the amount of the Liabilities or the existence of any default therein, or the giving of any notice under Paragraph E (2) above or otherwise, or the application to be made by the Assignee of any amounts to be paid to the Assignee. The sole signature of the Assignee shall be sufficient for the exercise of any rights under the Policy assigned hereby and the sole receipt of the Assignee for any sums received shall be a full discharge and release therefor to the Insurer. Checks for all or any part of the sums payable under the Policy and assigned herein, shall be drawn to the exclusive order of the Assignee if, when, and in such amounts as may be, requested by the Assignee.

G. The Assignee shall be under no obligation to pay any premium, or the principal of or interest on any loans or advances on the Policy whether or not obtained by the Assignee, or any other charges on the Policy, but any such amounts so paid by the Assignee from its own funds, shall become a part of the Liabilities hereby secured, shall be due immediately, and shall draw interest at a rate fixed by the Assignee from time to time not exceeding 6% per annum.

H. The exercise of any right, option, privilege or power given herein to the Assignee shall be at the option of the Assignee, but (except as restricted by Paragraph E (2) above) the Assignee may exercise any such right, option, privilege or power without notice to, or assent by, or affecting the liability of, or releasing any interest hereby assigned by the undersigned, or any of them.

I. The Assignee may take or release other security, may release any party primarily or secondarily liable for any of the Liabilities, may grant extensions, renewals or indulgences with respect to the Liabilities, or may apply to the Liabilities in such order as the Assignee shall determine, the proceeds of the Policy hereby assigned or any amount received on account of the Policy by the exercise of any right permitted under this assignment, without resorting or regard to other security.

J. In the event of any conflict between the provisions of this assignment and provisions of the note or other evidence of any Liability, with respect to the Policy or rights of collateral security therein, the provisions of this assignment shall prevail.

K. Each of the undersigned declares that no proceedings in bankruptcy are pending against him and that his property is not subject to any assignment for the benefit of creditors.

Signed and sealed this ______ day of ______, 19____

______ *Witness*	______ (L.S.) *Insured or Owner*
______	______ *Address*
______ *Witness*	______ (L.S.) *Beneficiary*
______	______ *Address*

needs of all but the smallest firms. Where the profitability of the business is dependent upon the owner, insurance on his life offers a lender valuable protection beyond the cash value of the policy.

Assignment of Claims

Assignment of claims as loan security consists principally in assignment of claims against the United States government. Table 1 (page 386) shows that these amounted to 5.4 per cent by dollar volume and 4.8 per cent by number of all secured bank loans outstanding in November, 1946. These assignments tend to increase in importance during periods of war or defense activity, when the government is placing many contracts.

The assignment by a borrower of a claim against the government permits the lender to stand in the shoes of the borrower with respect to funds earned on the contract. From the lender's viewpoint there is not the credit risk there might be in claims against other, lesser debtors. However, the Federal government will not make payment unless the contractor (the borrower) lives up to the terms of the contract. There is always risk to the lender in nonperformance on the part of the debtor, disputes over performance, and possible delays.

Government contracts, particularly in times of emergency, are likely to be large in comparison with a firm's normal volume of business. When this is the case, outside financing is generally required. Because the funds needed are so large in relation to normal requirements, only firms with the highest credit standing can still expect to obtain short-term credit on an unsecured basis. Assignment of monies receivable from the government on the contract is therefore a logical security device imposed by lenders. Commercial banks are the most important lending institutions on such security.

Government Guarantee and Insurance

Several agencies of the Federal government, and the Federal Reserve banks are authorized to guarantee or insure loans made to business enterprises. The total of such loans is small in normal times. The Veterans' Administration insures business loans to veterans up to $4,000; the FHA is authorized to insure loans to manufacturers of prefabricated houses and to dealers or contractors purchasing the houses from manufacturers; and the Federal Reserve banks can guarantee all or part of defense loans (V loans). The GI loans and the V loans may be short-term or may run for periods of more than one year. The bulk of the V loans since they are primarily to finance manufacturing operations are probably in the short-term category. The FHA-insured loans to manufacturers can have a

maximum maturity of one year, and those insured to dealers in the housing field to a maximum maturity of six months.

The commercial banks are the principal lending agency on all these classes of loans. They may require the pledge of additional security beyond that of the government guarantee or insurance.

Questions

1. What are the alternative methods for raising funds on the basis of accounts receivable?
2. In what principal ways do these methods differ? In what ways do they overlap?
3. What might account for the increased popularity of accounts receivable financing of all forms in recent years?
4. What are the principal security documents used in connection with accounts receivable financing?
5. What is the general procedure for notification financing?
6. What is the general procedure for nonnotification financing?
7. What is the significance of the term revolving credit?
8. Why may such revolving credit be economical in the long run even though its rate be comparatively high?
9. What are the principal requirements of those who lend on accounts receivable as collateral?
10. Discuss the relative weaknesses of the three miscellaneous types of collateral loans discussed at the end of this chapter so far as general use is concerned.

PART V

INTERMEDIATE- AND LONG-TERM FINANCING OF ASSET REQUIREMENTS

Chapter 18. TERM LOANS AND EQUIPMENT FINANCING

Loans are generally classified on the basis of their term or duration: short-term, intermediate, and long-term. Usage may differ, but short-term includes credits running for 1 year or less, most often 6 months or less; intermediate credits are ordinarily thought of as those which run over 1 year but not over 10 years; and long-term credits are for longer periods, typically for some period such as 15, 20, 25, or 30 years.[1] Longer periods are exceptional. These variations in term, or life, have distinct bearing upon the problem of repayment and, accordingly, the uses to which the funds may be appropriately applied.

Our study of financing thus far has been restricted to that of short-term. In the present chapter we shall concern ourselves with the intermediate-term, more specifically, cash term loans and equipment financing by installment sale contract. From the standpoint of historical development these forms of financing are relatively new, not that such financing arrangements have not existed for a long time but rather that they have received widespread attention only in comparatively recent years and their characteristics have only recently become formalized in practice.

Several explanations of this recent development exist. The widespread invention of specialized tools, machines, and miscellaneous equipment, with their attendant economies or customer appeal, created a need for helping businesses finance their purchase. Although the traditional short- and long-term methods were usable for this purpose, they were not well suited in some ways. The short-term loans did not provide a sufficiently long enough time to permit recovery of initial outlay from the use of the goods. The long-term, on the other hand, were not always available, either because of the absence of investable funds on the part of the owners or because potential long-term lenders were not willing to assume the higher risks that were sometimes associated with these purchases.

As a consequence, manufacturers of the equipment in many cases came to assume responsibility for their financing. This financial assistance took one of two forms. On the one hand, the goods might be sold on a partial payment basis with the remaining balance paid over a predetermined period of time in installments. This is the procedure so familiar to the

[1] Other authors have selected 15 years as a desirable point at which to draw the line between intermediate and long credits. See, for example, Neil Jacoby and Raymond Saulnier, *Term Lending to Business* (New York, National Bureau of Economic Research, 1942), p. 14.

consuming public in the sale of durable consumer goods. Or, on the other hand, the manufacturer might never intend for title to the goods to pass and merely enter into a rental contract with the user.

It was a natural step from the sale of equipment on the installment plan to the negotiation of installment loans the proceeds from which could be used to acquire the equipment outright. Traditionally the commercial bank is limited in its lending program to the making of short-term, self-liquidating loans. For this reason there was some initial reluctance toward extending credits that did not call for complete retirement until after some two, three, or even five years. Also, the means of repayment was to be not the sale of the goods but rather the net free cash generated from its use.[2] This condition imposed an added element of uncertainty which was seen to be incompatible with the demand characteristics of the bulk of the commercial bank's liabilities and its high fiduciary position in the community.

In time, however, certain conditions made for a change in attitude. First were the institutional changes in the banking system which provided for acceptance of less liquidity in bank portfolios. One of these was the creation of the Federal Deposit Insurance Corporation with its means originally of safeguarding deposits of $5,000 and less.[3] By acting as a psychological check to bank runs, it made possible some shifting to longer-term credits. The other principal institutional change came about through amendment of the Federal Reserve Act to provide for relaxation of eligibility requirements in borrowing from Reserve banks by member banks. Through these amendments liquidity of individual banks was protected by central bank backing in addition to their own lending policies.

Another change in favor of intermediate-term lending was represented by the attitude of bank examiners. Prior to the difficulties that accompanied the depression of 1932–1933, examiners were faithful to the concept of traditional bank lending being tied to short-term, self-liquidating loans. As a means of fulfilling this end it was common for commercial banks to be expected to have their individual loans cleaned up individually at least once a year. This requirement came to be met in many cases in a fictitious rather than a real sense. Banks might lend to businesses for purposes involving an intermediate length of term but under a standard short-term agreement. When the maturity day arrived, the bank would merely renew the loan for another short period of time. And in order to comply with the annual cleanup requirement, they might en-

[2] Net profit plus noncash charges such as depreciation.

[3] The coverage was increased to $10,000 in 1950.

courage the borrower to substitute another form of credit for a very temporary period.

Clearly such practice conformed only with the letter of the unwritten law rather than the spirit and accentuated the difficulty when business in general declined. The loans could not possibly be paid off because of their quasi-permanent nature, but the banks having the right to demand payment often did so and thereby accentuated the general economic difficulties. As a result of this unhappy experience and the realization that some bank lending on intermediate term was justifiable, examiners were required to revise their own thinking and condone a certain amount of such lending when it was conducted under straightforward and appropriate terms.

Finally, the depression of the thirties brought with it a dearth of lending opportunities. Once the banking crisis was relieved and the individual banks settled down to more or less normal operations, they found themselves, with an excess of loanable funds, faced with a general contraction of demand for such funds. This situation encouraged them to seek new outlets and to pioneer in developing new loan arrangements. The intermediate-term installment loan was a logical direction in which to move.

Despite these contributing and facilitating factors, credit should also be given to those progressive leaders in the commercial banking field who, recognizing the social importance of providing suitable lending facilities, have striven to devise new lending arrangements that would meet community needs and yet be adequately safe for banks of deposit. Intermediate loan forms probably represent one of their greatest achievements of recent years in this respect.

Term Loan Characteristics [4]

The term loan is variously defined by different authors, but in any case it is characterized primarily on the basis of length of term, method of repayment, collateral security, and the inclusion of protective covenants in the loan agreement. Ordinarily, it is thought of as an installment loan made by a commercial bank running for a period up to as much as 10 years. In only a few cases do the term loans of commercial banks exceed 10 years, and the most typical term is 5 to 7. If a bank makes a longer loan, it will in all likelihood enter into a participating agreement with other

[4] The contents of this section are based upon the findings of such authoritative studies as Jacoby and Saulnier, *op. cit.;* Duncan Holthausen, "Term Lending to Business by Commercial Banks in 1946," *Federal Reserve Bulletin,* May, 1947, pp. 498–517; and Herbert V. Prochnow, *Term Loans and Theories of Liquidity* (New York, Prentice-Hall, Inc., 1949).

banks or life insurance companies. These latter concentrate their intermediate lending activity upon loans of longer maturity and even though these may in some cases have the same installment plan of retirement and other features of similarity as the bank loans, they are infrequently called term loans.

"The most common feature of term loans is a plan for serial or installment repayments under a predetermined schedule." [5] The most common arrangement is for equal periodic payments to be made by the month, quarter, half year, or year, but provision is sometimes made for variable payments governed by volume of sales or the amount of net income before depreciation. Since relatively few of the intermediate-duration loans made by life insurance companies provide for installment repayment and they are commonly of large size and longer average term, it is appropriate that their discussion be postponed to the next chapter, which is devoted to long-term credit. All further discussion of term loan characteristics, therefore, will be limited to the installment-type intermediate loan of the commercial banks.

The greater number of term loans are secured. The form of collateral used in such arrangements runs the whole gamut from accounts receivable to fixed plant, but the more standard types of property used are machinery and equipment, buildings, and occasionally stocks and bonds. Current assets are only seldom used. Commonly the smaller loans are the ones to carry a security provision of some sort, the reason being that these are usually made to smaller and less well-established businesses and therefore carry with them a higher risk. As a consequence, the dollar volume of term loans is more heavily unsecured than secured, despite the fact that by far the greater number of such loans are secured.

Term loans tend to include specific security provisions more often than the commercial bank short-term loans. Several reasons may be offered for this fact. One is the shorter maturity of the latter and the greater ability in general to judge the credit risk involved. Another is the fact that term loans tend to be smaller on the average and are more often made to small and newer businesses with their attendant higher risks. A final point is that the novelty nature of the credits has contributed in some cases to a greater sense of caution on the part of bankers when executing a term loan agreement. There is some evidence to support the belief that security provisions will become increasingly less important in the future than in the past, but the change in this direction is not likely to become in any way pronounced. What change is evidenced in this regard can be most reasonably explained by the increasing familiarity of bankers with the making of these loans and their greater receptiveness in general toward

[5] Holthausen, *op. cit.*

the acceptance of these credits as legitimate banking business. The recent tendency has been for greater reliance to be placed on protective warranties in the loan agreement rather than on specific collateral security.

The inclusion of these protective covenants in the loan agreement is one of the characteristic features of term loans. Since the proceeds of the loans are commonly used for "permanent" as opposed to "temporary" needs, the lender must make sure that, in the absence of some direct day-to-day control, restrictions be imposed upon the management of the business in areas that have direct bearing upon the welfare of the lender's position. Some of the more common types of restrictive clauses are those which (1) require the maintenance of a given working capital position, (2) limit the payment of dividends to or withdrawals by owners, (3) prevent the sale or other disposition of certain basic properties, (4) limit the extent to which other obligations may be incurred, particularly those involving a preferential lien against property of the business, (5) require strict compliance with the terms of other obligations (payment of taxes, insurance, and interest on other debts, etc.), and (6) require the maintenance of suitable accounting records and the preparation of reliable reports therefrom. The manner in which these restrictions are imposed may take one of two forms. On the one hand, there may be a flat prohibition against any encumbrances (liens) being placed upon the assets of the business; or there may be the dormant (or negative) type of provision which becomes operative only if there is failure to comply with requirements on another score. For example, the payment of dividends may be forbidden if working capital or earnings fall below a given level.

For reasons that will be developed later, the term loan is peculiarly suited to the financial needs of small and relatively new businesses and is consequently more often used by them. This makes for their average size being small. The smallness of size, therefore, is a condition of the use to which the proceeds of the loans are most commonly put, and not an inherent trait. Similarly, although there is some evidence to support the belief that term loans are more expensive on the average than either ordinary short-term bank loans or long-term debt, the reasons are not clear-cut. Probably short-term loans have paid lower rates because of a relative lack of good short-term lending opportunities during the past two decades. In general, short maturities have shown lower yields than long maturities during that period. On the other hand, comparisons of intermediate and long maturities have been between loans of unlike quality.[6] In general, smaller sized borrowers with lesser credit standing

[6] Richard Youngdahl, "The Structure of Interest Rates on Business Loans at Member Banks," *Federal Reserve Bulletin,* July, 1947. This author states, for example, "the differences in rates charged for loans of various maturities are small and are

are mostly in the former category and would pay higher interest rates in spite of shorter maturity. The cost of supervising loans of smaller size also makes for a higher interest charge.

Uses for Which Term Loans Are Suited

The term loan is especially fitted for expansion of either fixed assets or working capital that cannot be readily financed out of the current year's earnings. Because of the difficulty with which the small- or medium-sized business raises equity capital except by retaining earnings, the term loan is especially important in this case. The loan allows the purchase of machinery or an expansion of current assets, which in turn would contribute to an increase in sales. With this increased sales volume the business has the expanded profits as well as existing earnings with which to discharge the debt. As the term of the loan passes, the business substitutes equity capital in the form of retained profits for the debt.

This substitution is accomplished each time an installment payment is made. If the expected increase in earnings materializes, it is possible that the business can pay dividends or permit owner withdrawals that would be impossible if the growth were financed on a pay-as-you-go basis out of earnings rather than by borrowing. On the other hand, the intermediate maturity protects the business against the hazards of inability to renew, which were always present in the conventional short-term bank loan. The reasoning is the same whether the expected profit increase is to be derived from a lowering of costs from a machinery purchase or expanded sales from increasing current assets. However, the risks of short maturity are greater in the case of fixed asset as compared with current asset expansion because of the greater inflexibility.

Another very important use of the term loan is that of refinancing existing debt. If a business finds that its reliance upon short-term debt is acting as a drag upon its credit standing and profit prospects, as would be the case with failure to take cash discounts on accounts payable, a certain portion of the short-term liabilities might well be lengthened through the use of a term loan. The exchange of current into longer term liabilities increases the working capital. On the other hand, a business might already have outstanding a long-term indebtedness bearing a high coupon rate or having a single repayment date in the near future. Again the financial position and the profit prospects might be served by converting this issue into a term loan. The installment repayment provision could serve as a protection to the new creditor (and thereby an inducement to

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outweighed by differences related to other factors such as size of borrower, size of loan, and type of security pledged."

his entering into the agreement) by offering a formal and realistic schedule for the retirement of principal.

Another, and final, major use of term loans is that of providing for repairs, improvements, or additions to physical plant. The direct benefits from such uses are often not as readily discernible as in the other three cases cited, but the general profitability of a company may well justify the making of the loan nevertheless. Again what would ordinarily require the use of equity funds may be accomplished temporarily by a debt form which provides for the periodic substitution of equity through forced retention of earnings.

In the final analysis, whether or not a business will be able to obtain a term loan can be determined only by negotiation with the particular bank. Some banks frown upon loans of more than a year as a matter of general policy. But even with ones that make such loans, their willingness to make a particular loan will vary depending upon whether or not they have funds free for such a term, their feeling of obligation to the loan applicant because of past profitable deposit balances, their estimate of the risk in the particular line of business, their confidence in those managing the business of the applicant, and the general business outlook.

Comparative Advantages of Term Loans

The comparative advantages of term loans from the user's standpoint in relation to the alternative methods of financing, namely, equity, short-term debt, and long-term single repayment debt, should be considered. With respect to protecting *control,* by being a form of credit, term loans possess the general advantages attributable to all credit devices in this regard. Although the restrictive clauses included in the loan agreement are commonly greater than those associated with short-term loans, still they do not involve an actual sacrifice of day-to-day control as might be the case with some equity instrument.

From the *cost* standpoint little can be said that would have any precise reliability. As with any credit device, the term loan will ordinarily be cheaper than equity by being limited in the extent to which it participates in income (and thereby protecting the owners against dilution of their own return) and by having a tax advantage in the case of corporations. There is some reason to believe that term loans may be more expensive than short-term credit by virtue of their longer term, collateral provisions, and installment payments, but as stated earlier, precise generalization as to comparative cost advantages in the case of alternative credits is always unwise because of the multiplicity of factors having opposing influence. The size of the loan, the line of business and the earning record of the

borrower, and the demand for credit in general will ordinarily have much more bearing upon a particular loan cost than any of the other factors.

One of the distinct advantages of the term loan arrangement is its conformance to the duration of the need for funds. This condition contributes to *safety* in the over-all financial program without sacrifice of equity position. The use of short-term credit for the semipermanent needs discussed above places the borrower at a distinct disadvantage by enabling the creditor to call for payment before the borrower can recover the investment through operations. This is the situation that was mentioned in the introduction as having prevailed during the early thirties and contributed to an aggravation of the general economic difficulties at that time.

In comparison with a long-term single-payment loan, the greater safety of term loans may be ascribed to the formal arrangement for returning the principal on a predetermined periodic basis. The duration of a conventional type of long-term loan may safeguard the solvency of a business just as well as that of a term loan, it is true, but the absence of a compulsory schedule for gradual retirement of the debt may well operate to the detriment of the debtor as well as creditor. So long as there is excess money around that has been generated from the use of the expanded assets, there will be strong temptation for the business management to employ it actively rather than in reducing outstanding debts. For example, it may be withdrawn by the owners or invested in additional assets. The final maturity date in such a case will find the business without the necessary cash to complete debt retirement. To some extent the inclusion of a sinking fund provision may reduce the dangers of this temptation, but in practice the end is not served as well as with the installment repayment because of the lesser sense of compulsion generally associated with it.

It might be argued that the periodic installment payments actually impose a greater burden upon the borrower in the same sense that the more rapid maturity of short-term loans may endanger solvency. However, there are several conditions which tend to minimize this contingency. To begin with, the installment payments are worked out on the basis of presumed ability to pay, which is not the case with short-term loans used for financing semifixed asset needs. Furthermore, calculations as to ability to pay will ordinarily include a margin of safety to allow for ordinary business fluctuations. Finally, if a borrower suffers only a temporary setback, a periodic installment need not force bankruptcy because the creditor in such cases can rather easily be shown that his interest will be better served by a renegotiation to the end of allowing an extension of

time with respect to this single payment or rearranging the size and due dates of all the remaining payments. Such renegotiation is more likely to be possible in dealing with a single creditor, one's bank, instead of a group of creditors with which a less intimate relation is enjoyed. As a minimum, the bank expects interest payments to be met, and the stronger the long-run earning position of the borrower, the more likely are concessions to be made.

In keeping with this advantage of safety through greater conformance of maturity with need, the term loan is particularly suited to the *facilitation of future financing.* By gradual retirement of the obligation, the long-term financial position is improved over what would be the case if a long-term indebtedness were incurred. The ratio of net worth to fixed debt is made greater, and this condition in turn may widen the possible sources of funds to which the business has access. By avoiding the use of short-term debt for semifixed purposes, what is more, the current financial position of a company is kept in a sounder state, which helps credit standing and avoids the kind of financial pressure which can greatly reduce the efficiency and profitability of operations.

Major Sources of Term Loan Credits

At the present time there are only two kinds of financial institutions which lend on the basis of term loan agreements to any great extent. These are the commercial banks and the life insurance companies. Other institutions engage in the practice to some extent, but as yet their volume is so relatively small as to justify only casual mention. They are the 12 Federal Reserve banks, the Reconstruction Finance Corporation, some savings banks, and a few installment finance companies. It may well be that these will all become more significant in the field in the future, particularly the last two private institutions, but there is no justification at the present time for giving them any special attention. One point of exception might be taken to this statement, however. The term loans made by the RFC and the Federal Reserve banks, although comparatively small in aggregate amount, may none the less carry weight from the standpoint of availability in particular cases. These loans are made under special statutory permission which limits their extension to businesses that are unable to satisfy their legitimate credit needs from the regular private channels. They may therefore constitute a very strategic and important source of funds to such businesses.

Of the two major sources of term loans mentioned, by far the most important today is the commercial bank. The availability of such credits will, of course, differ with each individual bank, but on the whole this

form of lending may be said to have become a basic part of their regular operations since the early 1930's. Shopping for satisfactory individual term loan arrangements, however, is to be encouraged. All too often the businessman becomes wedded to a single bank and accepts passively the loan arrangements made available to him without first inquiring of other banks or other lending agencies. Although a continuing banking relationship is to be desired and should be fostered, there is nothing incompatible about this and occasional shopping around to make sure that one's best interests are being served. Some banks are not prepared organizationally to offer any and every service, and others may feel "loaned up" at particular times and therefore be more selective than they would ordinarily be. However, because banks are likely to grant credit more freely to customers with whom they have established relations, it helps to do one's shopping in advance of actual need and do one's general banking where credit can be had.

Requirements of Term Lenders

If a potential borrower is to be most successful in acquiring his desired credit, he must be reasonably well informed of the common operating characteristics and attitudes of the lender together with the usual requirements imposed upon debtors with respect to credit standards and operating procedure. Although the various suppliers of term loans maintain somewhat different requirements and employ somewhat different methods, these are mainly differences of degree rather than kind. Their approach to the problem is much the same.

As has already been developed in previous chapters, lenders in judging credit risk and in limiting their own possible loss from this are primarily interested in four things, (1) the earning potential of the applicant, (2) its solvency and financial structure, (3) general considerations pertaining to the business and its management, and (4) protective covenants and collateral security. Probably the most basic difference in the bank lender's thinking about short-term and intermediate loans is a shift of primary attention from the current position, or solvency, of the business to the ability of the borrower to generate cash for loan repayment out of earnings. This is not to say that the other two factors of solvency and management performance are not important: it merely is intended to indicate the shift in emphasis that must take place to compensate for the basic differences in the two loan arrangements with their associated differences in risk.

Since the term loan is generally intended for some semifixed purpose, as described earlier, the ability of the borrower to repay the loan depends

upon earnings since no intention of liquidating the assets exists. Actually, much the same could be said for many short-term bank loans unless they are employed in a seasonal operation. However, bankers have been more prone to regard borrowing for current asset financing as "self-liquidating" even though it was clear that the borrower intended to expand operations to a higher level where the funds would circulate or revolve more or less permanently.

The lender is likely to give the greatest weight to the record of demonstrated past earnings even though he will be interested in estimates of additional earnings expected to result from the use of the borrowed funds. Allowance is made for customary earnings allocations in the form of proprietor's withdrawals and any preferred or common dividends that are planned. Such distributions might have to be reduced if necessary to care for the loan amortization. On the other hand, the depreciation expense, which is a noncash item, will be added back to the net earnings to measure the net cash generated by operations. Where replacements are planned during the period of loan repayment, they will, however, use up that much of the depreciation money. Nevertheless, in a pinch, most replacements can be deferred in a period of slack operations.

Evidence that the major concern of the lender in the extension of term credits is with the long-term or profitability aspects of the borrower's position is provided by the fact that many of the banks that have gone into the business on a large scale have employed individuals with investment banking experience to assume responsibility for the loans.[7] Insurance companies, furthermore, extend such credits through their regular department concerned with private purchases of long-term securities.

A study of long-run strength, however, cannot disregard the factor of technical solvency. As has been emphasized so often before, an otherwise profitable business can be hamstrung by depleted liquid resources or a continued threat of insolvency. Furthermore, protection of any business investment is dependent upon careful management of cash position as well as successful profit performance. The term lender will therefore give attention to the conventional analysis of financial condition as described in Chapter 5 in order to make sure the business conforms at least to the minimum standards of safety, but principal concern will be given to the analysis of profitability as covered in Chapter 6.

Because of the weaknesses inherent in the analysis of financial statements for the judging of economic strength, the findings here will very probably be supported or tested by field surveys and opinions of special-

[7] See Jacoby and Saulnier, *op. cit.*, p. 74.

ists of one sort or another *where the size of the loan justifies the cost.* Careful attention is given to the business record of the senior officers as a means of evaluating their business ability and moral character. The type of product and competitive position of the company are studied. At this point marketing experts might be employed to appraise the suitability of the good or service and the merchandising methods employed. Any fixed properties that may be owned are studied from both the economic and the engineering standpoint, and again experts might be called in to make an appraisal. The adequacy of the insurance program is also determined, and if any deficiencies exist, a requirement for increased coverage will undoubtedly be included in the loan agreement. All these investigations are by way of trying to develop some understanding of the economic position of the business to the end of having some basis upon which to judge the prospects for the future. It is of course with the future that the lender is wholly concerned, and so failure to consider these most important factors in conjunction with the past financial record might very well result in a gross miscalculation.

It has already been pointed out that in order to compensate for the greater uncertainty that accompanies the lengthened maturity of the term loan, the lender requires the making of certain covenants by the borrower. These will be made part of the loan agreement. To a great extent they are similar to the protective covenants included in a regular bond indenture.[8] As pointed out earlier, they may require certain action, such as the increasing of the insurance coverage; or they may restrict or prohibit certain action, such as the withdrawal of owners, the incurring of additional debt, etc. These provisions in any case, though they may have common aims and general similarities, are tailor-made to suit the special circumstances surrounding the financial condition of the particular borrower and the general economic conditions prevailing at the time.

Contrary to what might be supposed, it is not common for any limitation to be imposed on the use of the funds unless the loan is granted for some special purpose, such as refinancing short-term debts. On the other hand, the right to continued review of the borrower's position is generally provided for by requiring access to the books of the company at intermittent intervals or preparation of special reports pertaining to financial position and operating performance. It is interesting to note that the various protective covenants are related closely to the credit appraisal in the over-all objective of safeguarding the lender's position.

[8] The bond indenture, as we shall see, is the detailed contract underlying a bond flotation in which are covered the several duties, responsibilities, and rights of the three parties involved—the issuer, or debtor, the bondholders, or creditors, and the trustee acting in behalf of the creditors.

Installment Financing of Equipment Purchases[9]

An alternative to borrowing cash under a term loan arrangement for the purchase of machinery and other equipment is to buy the item from a manufacturer or distributor on an installment sale contract. The procedure, as pointed out in the beginning of the chapter, is practically identical to that followed by some consumers in the purchase of automobiles, washing machines, and other consumer durable goods. The only technical distinction that might be made is that in the one case the seller is the manufacturer or his representative, whereas in the other case the seller is generally a merchant or retail outlet.

The types of equipment that have been financed by this means in the past are so numerous as to make it reasonable to conclude that practically any form of equipment can be so financed provided it is movable and does not become a legal part of the fixed property upon installation. There are even some cases in which this attachment to the real estate is no deterrent, but these are more to be reckoned as exceptions rather than the rule. The explanation for the movable requirement rests on the fact that such installment sales are always secured, and such mobility is essential to a sound lien.

The most common arrangement is for the transaction to be effected under a standard conditional sales contract whereby title does not pass to the buyer until full payment is made and all other terms of the agreement are satisfactorily fulfilled.[10] The equipment thereby serves as collateral protection to the seller in the sense that if default occurs he can repossess the equipment and resell it, subject only to the limitations that might be imposed by the law of the state in which the buyer resides. In those jurisdictions which do not permit the use of the conditional sales device, a chattel mortgage is generally used. Still another form of security document used is the bailment lease, but it is so limited in application and of such special legal character as not to warrant discussion here.

Another characteristic feature of the arrangement is that the credit is repayable in installments. The amount of the note or notes to be paid will represent the unpaid balance after adding to the sale price any costs of installation and financing and deducting the down payment. The most common provision is for this amount to be paid off on an equal monthly basis over a period of one to six years, and possibly more. The length

[9] The information in this section relies heavily upon R. J. Saulnier and Neil H. Jacoby, *Financing Equipment for Commercial and Industrial Enterprise* (New York, National Bureau of Economic Research, 1943).

[10] Despite the fact that title has not legally passed to the buyer, the property acquired is still carried on his balance sheet as an asset and the indebtedness is listed as a note payable among the liabilities.

of term will tend to vary with the custom of the trade and the normal life of the equipment sold. That is, the notes will ordinarily be repaid within a period substantially less than the normal useful life of the pledge. Ideally, the secondhand value of the security should exceed any unpaid balance. To the extent that any deficiency may exist in the security, the loan then in fact rests upon the general credit of the debtor. Some exceptions to the equal monthly installment schedule will also be made when peculiar income characteristics of the buyer so dictate (as with farmers), but it is certainly the commonest arrangement.

The amount of down payment required to a great extent defies any reliable generalization. It depends upon the financial strength of the buyer, the assumed depreciation and obsolescence rate of the equipment, the degree of competition among sellers and financial institutions which buy the notes, and general economic conditions. Were the variations due mainly to the second factor above, namely, that of depreciation, some fairly reliable formulas could be worked out; but in the main the factors influencing the decision are transitory. We would not be too far in error, however, if we said the great majority of contracts will, over an extended period of time, call for initial payments of 20 to 33⅓ per cent.

The cost to the buyer of the installment purchase plan is generally well above alternative financing methods, although the method of quoting the cost is different and thereby precludes exact comparison in some cases. Instead of being priced on an interest basis, a quasi-discount method is used in which a certain finance charge (quoted in percentage form) is added to the total unpaid balance of the purchase price of the article together with a flat insurance fee. This total sum then constitutes the amount paid off on the installment basis.

Since the finance charge is calculated on the full amount of unpaid balance (price plus installation plus insurance minus the down payment) and yet the balance is decreased on an equal monthly basis, the effective interest cost is a little less than twice the quoted rate. For example, suppose the list price of a machine is $2,500, installation costs amount to $150, and insurance for 2 years is $50. Further suppose that the down payment on this total bill of $2,700 is $810 and that the remaining $1,890 is to be paid off in equal monthly installments over a 24-month period. If the total finance charge is 6 per cent per annum, it will amount to $226.80 ($\$1{,}890 \times 0.06 \times 2$), and the sum of $2,116.80 (the unpaid balance plus the finance charge) will then be paid off over the 2-year period at $88.20 per month. Since the buyer, however, is getting the use of only a little more than one-half of the full $1,890 unpaid balance for the 2-year period, the effective annual rate is almost twice the quoted rate of 6 per cent,

more precisely, 11.716 per cent, or 0.9275 per cent per month compounded.

The term loan carries a straight interest charge on the outstanding balance only and would ordinarily, therefore, be substantially cheaper, provided the quoted rate were the same. This condition to a great extent conforms to real experience. The explanation, then, for the use of the installment purchase plan in place of the term loan is to be found in its greater availability. This, in turn, can be explained by the manufacturer's incentive to use the device as a form of sales promotion and yet seek protection against high credit losses through the strong collateral protection provided.

It is important to note at this point that although a manufacturer or distributor creates the credit, he does not commonly finance it. The responsibility for ultimate financing is usually assumed by regular lending institutions, particularly finance companies and commercial banks. These agencies buy the notes and contracts of the original seller or else lend to the seller on the basis of the contracts serving as collateral.

The relationship between the seller and financial institution, however, is not always the same. In most cases the latter will have full recourse against the seller in the event of default by the buyer, and under such circumstances the seller will assume major responsibility for the credit investigation and the establishment of credit standards. In the few cases in which the ultimate lender has no recourse against the seller, the credit standards will be imposed by him and a thorough independent investigation made of the credit risk. There are, however, a number of possible relationships of partial recourse. The financing agency may assume responsibility for the costs of repossession in the event of default, but the original seller must make good the unpaid balance through repurchase of the good. Or the agency may have full recourse during the period covered by the first several payments and no recourse thereafter. In any case, as with the secured term loan, the ultimate creditor is usually protected by an adequate down payment and a repayment schedule which, by intending to exceed the rate of depreciation or obsolescence, will maintain a protective equity margin throughout.

Irrespective of who assumes responsibility for the financing of the account, the general credit standing of the buyer will be a significant point of consideration. However, if the financing agency intends to purchase the note without recourse to the seller, greater attention will be given to this factor than otherwise; for as long as ultimate risk rests with the seller, there is the probability that credit standards will to some extent be relaxed in the interest of sales volume. With the lending agency, the income from the financing is the only source of profit; with the seller, on

the other hand, losses from lenient credit standards may be more than offset by the profit made from expanded sales.

There is one point that may account for a somewhat more relaxed appraisal of the credit-worthiness of the borrower in all cases of installment purchases than is common with most other loan arrangements. That is the importance given to the collateral security in protecting the position of the creditor. Not only is every such loan arrangement specifically secured, but, as was shown, care is taken to make the protection meaningful by having the equipment of a movable type and requiring a down payment and schedule of installment payments that maintain an adequate margin of equity. Repossession, in other words, can be a real, as opposed to a nominal, source of protection. The availability of such financing help, therefore, will depend largely upon the kind of equipment, the size of down payment that can be made, the income-generating ability of the buyer, and his general credit standing.

Rental Contracts as a Financing Device

The difference between an installment purchase plan and an equipment rental plan is to a large extent a matter of legal detail worked out to fit the laws of the particular state in which business is being conducted. Under the conditional sales contract, passage of formal title and the strength of the lien may vary as between jurisdictions, but the rise of automobile and home appliance financing has resulted in its being generally satisfactory to lenders if all the necessary formalities are observed. Under the "rental contract" no shred of title is intended to pass to the would-be purchaser unless and until he exercises an option to purchase by making the final payment, which then becomes the purchase price rather than "rent." Where the installment purchase contract is spread out over so long a period of time as to approximate the normal life span of the good purchased, then even any legal distinction between the two arrangements becomes very much obscured. Some have argued with good reason that many installment loan contracts are in the main rental provisions because the purchaser has no substantial equity in the property during the period of purchase or on the date of the terminal payment. It is not surprising, therefore, to find that the lease arrangement is used in some cases to facilitate the financing of certain types of machines and equipment. To date the practice is not widespread and has been restricted mainly to specialized equipment protected by strong patent rights and having a high dollar value. The principal examples are in the automatic-calculating- and business-machine and the shoe-manufacturing fields.

The specific rental payments may be fixed in amount or variable. If the former condition holds, the financial burden to the lessee is much the

same as if he had incurred a fixed debt. On the other hand, a variable rental based upon volume of sales or use of the machine has much to be said in its favor since it avoids the common dangers of a fixed charge burden. It may be recalled, however, that installment payments on term loans are sometimes similarly arranged to conform with the borrower's ability to pay.

This brief mention of the lease device as a possible means of financing equipment is worth making, but for most business purposes it will be found that the two other means, the term loan and the installment purchase, are much more readily available.

Summary

The forms of financing covered in the present chapter constitute the principal forms of the intermediate-term category of loan, which is ordinarily thought of as ranging in length from 1 to 10 years. Some loans are made with a length of term falling within this range and slightly beyond which are repaid on a single maturity basis rather than by installments. Since these credits resemble the long-term credits covered in the next chapter except for maturity, their discussion is deferred to that point.

The principal uses of the intermediate installment loans are (1) purchase of new equipment, (2) increase of working capital, (3) expansion or improvement of physical plant, and (4) refinancing. The installment purchase plan is, of course, restricted to (1) and (3). These objectives could also be accomplished by the long-term debt and equity forms of financing. However, ordinary long-term debt arrangement is not always available or advisable because of the small size of the borrower, the impermanence of the form of business organization under which it operates, and the length of time it has been in operation. Equity financing may not be suitable, on the other hand, because the present owners are without additional funds to invest, no new owner funds are obtainable, or the bringing in of new owners would result in unreasonable dilution of control and income.

The particular characteristic which contributes most to the advantage of the term loan or installment purchase plan for such purposes is the installment repayment arrangement. The procedure provides a formal plan for gradual retirement of principal out of current income, which process results in eventual substitution of equity for debt without any loss of control or income. In this way the financial structure of the business is kept simplified and the creditor's position is protected beyond what would be the case with an ordinary single-repayment long-term loan. Since all the uses cited above are of a semifixed nature, furthermore, the short-

term type of loan would be distinctly inadvisable to the borrower because of the possibility of the lender requiring complete retirement of principal at maturity before sufficient time had elapsed for the business to generate the necessary funds.

Because of the greater uncertainties that sometimes surround these intermediate credits, special precautions are taken by the lender to protect his position. One of the commonest of these is the inclusion of protective covenants in the loan agreement to prohibit certain action by the borrower or to provide for specific action in the event of definite conditions coming to pass. This particularly holds for the term loan as opposed to the installment purchase. With this latter more attention is given to collateral security provided by retained title to or a lien upon the property sold. Such collateral protection is also often required in the case of the term loan, but the tendency has been in recent years to give more attention to the covenants and less to the specific security.

Although there are various potential sources of intermediate-term credits, in actual practice they are limited largely to commercial banks, life insurance companies, and finance companies. The first two are principal sources of term loans and the first and third primarily responsible for the financing of installment sale contracts. While insurance companies do engage somewhat in the installment type of intermediate loan, their primary activity is in the single-repayment kind, usually with some sinking fund provision. The commercial bank therefore constitutes the best place for the businessman to turn initially in seeking an ordinary term loan, but he should be ever alert to potential alternative sources to further his own interests. With respect to the installment sales, some of the credits so created are carried by the seller himself, but the commoner arrangement is for them to be sold to a finance company or bank. This fact has meaning to the borrower, however, only with respect to the requirements he must meet; negotiations are still made with the seller at the time of sale.

The credit requirements for the two types of financing have both similarities and dissimilarities. As already mentioned, the installment sale credit is always secured by the property sold, but the term loan is about as often unsecured as secured. On the other hand, the maker of term loans will invariably require the inclusion of certain protective covenants in the loan agreement, whereas such is not the case with the other. This difference in security provision also has some bearing upon the type of credit investigation made. The installment seller is likely to give somewhat less attention to the credit standing of the buyer than is true for the term lender. In both cases principal attention is given to the long-run financial strength of the borrower, and in establishing this point

two factors are weighed heavily: the profitability of the business and the general position of the company and its management in the field and the community. The credit standards imposed, in other words, are more in keeping with those required by the typical long-term investor than those of the short-term creditor.

Questions

1. What are the principal characteristics of term loans?
2. How do these characteristics bear upon the use of these loans?
3. Who are the principal providers of these loans?
4. On the basis of our earlier discussion of commercial banking principles, how can the participation of these institutions in such loans be justified?
5. What are the principal points of interest to a credit officer in determining a business's right to such credit? Upon what primary point does the repayment of the loan depend?
6. What are the principal uses of funds secured from term loans?
7. How does the cost of term loans compare with that of alternative forms of credit?
8. How do these loans compare in general with alternative forms of financing?
9. What may account for the substantially increased popularity of these credits in recent years?
10. What reasoning supports the use of the installment repayment provisions? Is it likely to persist?
11. What types of business make most use of equipment financing in the form of installment sales?
12. How are these installment sales of equipment financed?
13. How do the installment sale credits differ from the term loans?
14. What is a possible way of financing equipment other than by term loans or installment sale credit? Elaborate.

Chapter 19. BORROWING ON THE BASIS OF LONG-TERM CREDITS: GENERAL CONSIDERATIONS

The previous chapter established intermediate-term credits as those having a duration of 1 to 10 years and long-term credits as those loans having a longer maturity. As pointed out at the time, this classification of credits by arbitrary time intervals is of doubtful value in itself. But there are certain other characteristics which are related to the factor of duration and have real meaning to financial management.

In the term loan we saw the intermediate credit specially fitted to serve the small- and medium-sized business unit which had reached sufficient size or had assets to pledge which offset the hazards to the lender of dependence upon the longevity, health, and energies of one or two owner-managers. Loans to be paid back systematically out of earnings over a short period enable the successful business to discount some of its expected retained earnings. When we turn to the long-term credit field, we come to the area of the business large enough to have built an organization with sufficient personnel to give permanence to the business. A reasonable assurance must exist that sufficient profitability will also be present to make the loan secure. Or there should be some property, usually in the form of real estate, which gives a prospective creditor added protection should default occur for any reason. In this field, the bond issue and the real-estate mortgage are the characteristic instruments. The points will be elaborated as the chapter develops.

Arrangements Used in Borrowing on Long Term

In every loan arrangement, regardless of the length of term, it is customary for a printed form to be executed which establishes the basic terms of the agreement. This promissory agreement may be a very simple note similar to Exhibit I, Chapter 15, or a complex type including protective covenants or promises and collateral security provisions in addition to the basic terms of indebtedness. In some complex bond issues it may consist of several hundred pages of writing and forms. In the case of long-term credits, the more complicated type tends to prevail, but practice will vary according to whether the lender is a single individual, an institutional investor, or a group of individuals and institutions (bondholders) operating through the offices of a single agent.

If a long-term loan is obtained from a person who is associated with

the borrower in some capacity, it would not be unusual to find the evidence of indebtedness a simple type of note. This is a common occurrence, for example, in the financing of small, closely held enterprises which resort to the long-term credit route for one reason or another. More typically, however, the borrower on long account is a reasonably large, well-established business, the requirements of which cannot be met by a single relative, friend of the family, or interested associate. In such cases it is more common to deal directly with some specialized lending institution, such as an insurance company, a savings bank, or a trust company, or to borrow from a large number of individuals through the sale of a bond issue.

When borrowing directly from a financial institution, the debtor will typically enter into a formal and elaborate loan agreement. The terms of the agreement will tend to be tailor-made on the basis of direct negotiation between the borrowing business and the lending institution. Special provision for the pledging of specific property to serve as collateral security may or may not be made as the peculiar circumstances dictate. But in every such case, protective covenants of one sort or another will be found, although their specific form will vary with the particular needs. Such debt in one or few large pieces is not ordinarily in a readily marketable form.[1] The lenders expect, for the most part, to hold their investment until it is paid off. Sometimes, the agreement may permit the exchange of the debt into bonds of convenient denomination that could be resold in the open market.

This procedure of entering directly into a long-term credit relationship with one or a few institutional investors is known in financial circles as "private placement" or "direct sale." True, the borrowing from a person on long term conforms with the general meaning of the term "private placement," but as used in a technical sense it refers to borrowing direct from an institution on a formal basis.

Instead of private placement, the debt might be sold in pieces to the investment public. In recent years, the bulk of such issues has been bought by institutions rather than individuals. The individual instrument evidencing partial ownership of the long-term indebtedness and stating certain other general facts about the obligation is known as a "bond," and the over-all borrowing procedure is known as a "bond flotation" or "bond issue."

It is clear that in the case of such borrowing the debtor cannot negotiate with the multitude of persons sharing in a large debt issue. Consequently, the details of the contract will be worked out with the investment bankers. This contract is known as the "indenture," and if it comes within the terms

[1] The conditions necessary to ready marketability were discussed in Chap. 2.

of the Federal act, it must conform with the Trust Indenture Act. Moreover, it would be cumbersome and expensive for the individual creditors to enforce the provisions of this indenture, and so a "trustee" is named, ordinarily a banking institution with a corporate trust department, who represents the numerous bondholders. If, for example, some covenant were violated or interest payment defaulted, it would be the duty of the trustee to act on behalf of the bondholders. The bonds themselves are individual promises to pay and may recite briefly some provisions of the loan, such as maturity date and sinking fund; but, in general, reference to the sometimes massive indenture, or trust agreement, for the details about security pledges, protective clauses, and so forth, is necessary.

Reasons for the Use of Long-term Credit

Long-term debt financing offers business management many possible advantages. In comparison with equity it enjoys all the possible advantages cited in Chapter 2 as applying to the use of creditor funds, *i.e.*, protection of management control, protection of income, reduction of income tax, etc. However, there are more specific attributes of long-term debt forms which offer distinct advantages of their own over the shorter term forms of debt or enable a more suitable accomplishment of the general advantages. The very extension of term avoids the danger of rapidly recurring maturity of principal with its attendant threat to solvency. The long-term maturity also avoids the need for continual attention to the refinancing of the business's asset requirements and thereby permits greater assurance as to the protection of control and the cost of the borrowed funds, to say nothing of the very availability of the funds themselves.

In other words, when it comes to explaining the use of long-term credit the problem finally resolves itself into showing the possible advantages of long-term arrangements over short-term for certain financing purposes. If fixed assets are to be expanded or the permanent current assets increased, a short-term form could be extremely dangerous in that the means for repaying the loan could not possibly be generated out of the normal use of these assets by the date of maturity. Or if past expansion of current assets by short-term credit appears to have acquired a permanent basis, then the short-term financing might well be converted into a long-term form. This process is known as "funding." From the standpoint of normal operations, long-term debt is the natural competitor of equity, if you will, in serving the permanent asset needs of a business.

On the opposite side, there are two special dangers associated with the use of long-term debt that will always be taken into account by scrupulous financial management. One is that the very permanence of the

indebtedness can work a hardship on a business that subsequently meets with adversity. The interest due on the obligation is typically a fixed charge which must be met regardless of the economic and financial health of the business. A heavy fixed-charge burden of this type has often contributed to the failure of business enterprises. The situation faced by many railroads in the 1930's is a case in point. Sometimes, too, a business will enter into a long-term debt on a fixed interest basis and discover some years later a general decline in the market rates of interest or substantial improvement in its own credit that would justify borrowing on more favorable terms. Where possible, most managements will provide a hedge against these contingencies by including a prepayment provision which enables the debt to be refunded, that is, paid off out of the proceeds of a new loan obtained at the lower interest cost. Although long-term credit may in some cases be more flexible than equity, this is not one of its great attributes; and the contractual interest charge may at times become oppressive.

The second danger to the use of long-term credits is that, by not having a sense of urgency hanging over it in the way of meeting a maturity date, management may become lax in providing for the eventual retirement of the obligation. This contigency was mentioned in the preceding chapter and offered as an advantage to an installment repayment provision. The danger may be small in some cases because the business is in a strong enough position to refinance the obligation. Most of the large electric utility companies, for example, not only secure a large share of their funds from long-term debt issues but make little or no attempt to reduce the debt over the life of the contract. The expectation of these companies is that their business is reasonably permanent and that they will be able to issue new bonds to pay off the old as they mature. Nevertheless, the custom has grown stronger for both public utilities and railroads to incorporate at least moderate provision for the retirement of their bond issues since the troubled times of the 1930's.

Two devices for reducing the debt hazard have been used. The over-all indebtedness might be broken up into many parts with separate sequential maturity dates so that the essential feature of an installment provision is accomplished. Or what is more common, a sinking fund provision might be included which specifies that a certain sum of money or portion of the earnings shall be used to retire part of the outstanding loan balance. Often a management has to force itself to the long view to anticipate such troubled times and retire debt when times and earnings are good. The amount added to net earnings through the interest saving as debt is retired is often nominal after allowance is made for income taxes on the amount saved. The stockholder has to see his chief reward

in the increased safety and quality of his stock when earnings are withheld for long-term debt retirement.

Principal Users of Long-term Credit and Recent Tendencies

In keeping with this general discussion of the potential advantages and disadvantages of long-term borrowing, it is well to consider under what circumstances such financing is found in practice, together with recent developments along that line. In general, long-term borrowing is deemed to be suitable only for those businesses which are well established and have a record of reasonably stable operating performance. This might seem to suggest that such debt financing would constitute a relatively small per cent of the total funds used by business. Statistical evidence, however, supports the contrary view. For example, were Table 1 of Chapter 11 reproduced on a percentage basis so far as the financing methods are concerned, the results would be as shown in Table 1 of the present chapter.

TABLE 1

CONDENSED LIABILITIES OF COMPOSITE BALANCE SHEET FOR 300 LARGE CORPORATIONS IN SELECTED INDUSTRIES, 1950

(In per cent)

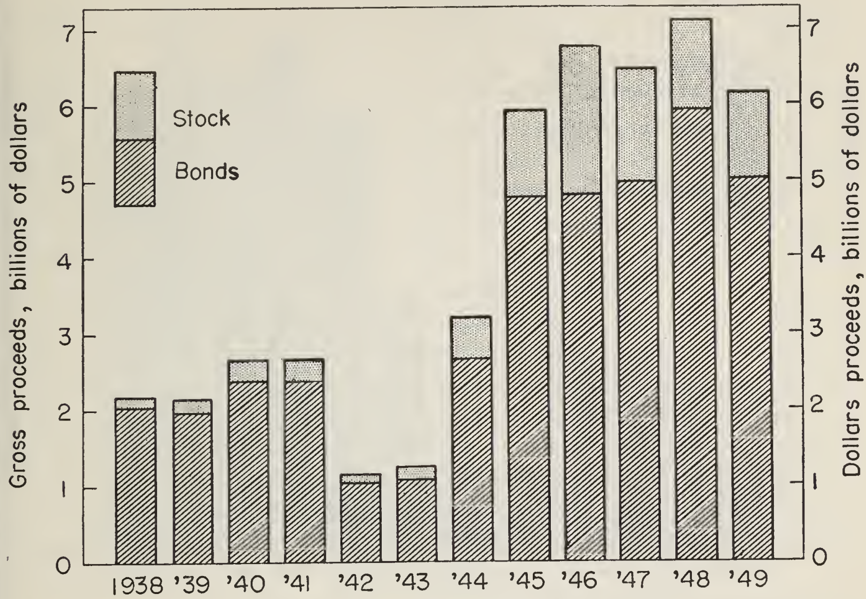
Item	Manufacturing	Retail trade	Utilities
Current liabilities	23.2	27.3	8.2
Fixed liabilities	9.6	4.7	39.8
Net worth	67.2	68.0	52.0
Total	100.0	100.0	100.0

Although the practice of using long-term debt is seen to vary greatly by type of business undertaking (a consideration which will be investigated more thoroughly shortly), still it must be recognized as a significant source of funds for all business enterprise. Further evidence to this effect is provided by Exhibit I. The high reliance placed upon bonds in new corporate security issues during the period 1938 to 1949 is illustrated. Nor is this condition merely a recent phenomenon; similar statistics dating back to 1919 indicate that the same situation has prevailed since then.[2]

[2] See article by Stanley F. Miller, "The Equity Capital Problem," *Harvard Business Review*, Vol. 26, No. 6, November, 1948, pp. 671–679.

Exhibit I

New Corporate Securities Offered for Cash in the United States, Classified by Type of Security



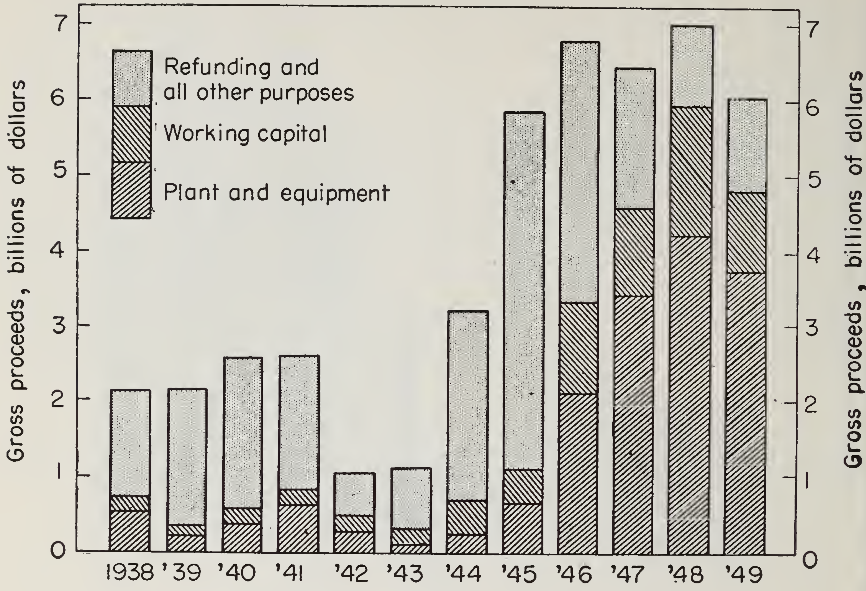
Source: Securities and Exchange Commission

Explanation for this importance of bonds in new security offerings is to be found in the fact that businesses capable of arranging for large-scale security issues of the type represented in the figures are sufficiently well established on the average to justify reliance upon credit. The businesses that are not secure enough to support an appeal for long-term creditor funds are also usually so new and small that they secure their equity backing on a personal direct negotiation basis, and so their activities are not included in the statistics. The high use of credit between 1938 and 1945, furthermore, is of limited significance because most new money raised during that period was for refunding purposes.[3] This is illustrated in Exhibit II. But starting with 1946 the proceeds began to be used more for expansion purposes than refunding purposes, and in 1948 and 1949 by far the greater part of the total funds realized was for the acquisition of new assets. From this it can be seen that bonds have become in recent years a principal means of financing business expansion

[3] By *refunding* is meant the retirement of one long-term indebtedness out of the proceeds provided by the incurrence of another.

Exhibit II

New Corporate Securities Offered for Cash in the United States, Classified by Intended Uses of Net Proceeds



Source: Securities and Exchange Commission

so far as it was done by the sale of securities rather than by short-term credit or retention of earnings.

Although the heavy reliance on long-term debt financing is not entirely a recent phenomenon, certain market conditions of the present time have contributed to a furtherance of the practice. First, the fiscal policies of the Federal government together with the aims of the central monetary management have brought about very low interest rates in the market. Since the early 1930's the government has been wedded to a policy of deficit financing and cheap money. This was started as a device for combating the general deflationary conditions that prevailed during the depression but became aggravated by the urgency of financing the Second World War. Now the government finds itself with a huge debt of its own on which there are high annual fixed charges. It therefore has continued its cheap money policy as a means of holding down the cost of the Federal debt and protecting the book value of the assets of those financial agencies which are heavily invested in government bonds. It is able to control the general rates of interest by establishing artificial

prices for its securities and having the Federal Reserve banks and other governmental agencies ready to buy or sell at these prices.[4]

Another market condition which has contributed to the heavy use of bonds in the last two decades is the general change in the flow of funds seeking investment. Since the economic debacle of 1929 to 1932, there has been a noticeable increase in the funds placed at the disposal of such institutional investors as life insurance companies, savings banks, and savings and loan associations. What is more, this increase cannot be accounted for solely by the general increase in national income; rather there is suggested a shift away from private individual investing to the institutional route.[5] Since these institutional investors are largely limited by law to investing in long-term debt instruments, this shift in market needs has had its influence upon business offerings.

When we leave the general and get down to the specific, we find, further, that financing practice differs according to the line of activity engaged in by the debtor. Electric power companies, for example, rely very heavily upon long-term credit. Their asset requirements are predominantly fixed in nature and must be acquired in one lump sum at the very beginning of operations. This means that the funds initially required are large in amount and that diversified financing is thereby encouraged. Since the assets are fixed, what is more, the corresponding financing need is of a fixed sort.

On the operating side of the picture, these businesses enjoy the position of a regulated natural monopoly so that once established a particular power company can at least look to reasonable stability if not high profitability. Therefore, the fixed charge danger associated with long-term debt arrangements is not very significant in the case of well-organized and well-managed electric power properties. Another point in favor of the use of long-term credit by these businesses is that since the return on the investment in them is regulated by the government, there is even greater incentive to trade on equity so as to obtain the benefits of favorable leverage. If a utility is able to earn 6 per cent on its total operating assets while borrowing one-half of its requirements at 3½ per cent, the equity interest is able to enjoy a return of 8½ per cent.[6] For these rea- Equity trading

[4] As of very recent date this policy has been relaxed somewhat so that government bond prices have dropped slightly and long-term interest rates risen accordingly.

[5] In support of this point see Harry G. Guthmann, "The Movement of Debt to Institutions and Its Implications for the Interest Rate," *Journal of Finance,* Vol. 5, No. 1, March, 1950, pp. 70–87.

[6] There has been some tendency in recent years for this advantage to be killed by having the regulatory authorities determine fair return on the separate investment categories rather than on total assets. For example, 8 per cent might be allowed on

sons it is customary to find electric power companies with 40 to 50 per cent of their capital structures in long-term forms. Some authorities establish 60 per cent of the capital structure as the maximum limit to the use of such financing by these companies and require an interest coverage of at least 3 to 1 over a representative number of years.[7]

Other utilities, such as gas, water, and telephone companies, street railways, and railroads, also make considerable but varying use of bond financing. The greatest changes in financing have occurred in the case of the street railways and the railroads. The electric street railways were heavy users of bonds at the height of their popularity. During the 1920's they lost position and earning power rapidly in all save the very largest cities as the private automobile grew in use. As the bus displaced the electric car in many cities, financing took the form of serial debt payable over shorter periods to allow for the shorter life of the newer types of equipment. The railroads' troubles did not become clear until the depression of the 1930's. A grave and prolonged decline in traffc and earnings made their substantial debt insupportable, and approximately one-third of the roads were reorganized and their debt reduced. Other roads escaping insolvency used earnings of the 1940's to reduce their debt substantially. These retained earnings have greatly changed the relative balance between debt and equity ownership. Debt financing in the railroad field since 1940 has been largely confined to issues of equipment obligations, which made a superior investment record even during the 1930's, and the occasional refunding of existing bond issues.

In the merchandising field is found a fairly wide variety of practice, but in no case is debt relied upon in anywhere near the proportions that are found among the utilities. From the standpoint of stability of earnings, some individual merchandising companies are admirably suited to long-term debt financing. They are well established in a community, have desirable locations, and deal in merchandise that serves basic consumer wants and has a reasonably low price range. All these qualities make for durable and stable earnings, the prime requisite to long-term debt financing. On the other hand, the asset requirements are mainly of a current sort, and the amount of initial funds required is small. Subsequent expansion can be accomplished gradually, so that in all the need for a variety of long-term financing methods is not great. Most companies engaged in this type of business will rent the premises used rather than own them, first because they do not have sufficient funds with which to

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common stock, 6 per cent on the preferred stock, and 4 per cent on the mortgage bonds.

[7] See, for example, R. E. Badger and H. G. Guthmann, *Investment Principles and Practices*, 4th ed. (New York, Prentice-Hall, Inc., 1951), p. 317.

buy and second because there are generally adequate facilities always available for rental. On the whole, therefore, the earnings of some merchandising companies might justify the incurrence of a fixed interest burden, but the absence of a need for heavy initial investments in fixed assets largely precludes the use of this. Those companies which do have long-term debt in their capital structures will usually be found to be large, well-established concerns which own their own premises.

The manufacturing field is made up of many kinds of businesses which differ greatly as to asset requirements and earning stability. On the one hand are the heavy-goods manufacturers, such as those producing machinery, automobiles, and farm equipment. These have a very heavy investment in fixed assets, but they rarely approach the character of the utilities in this regard. On the other hand, the assembly-type plants may have little in the way of fixed assets and a substantial proportion of current assets, particularly inventories. Also, in the case of the heavy- or durable-goods manufacturer, earnings fluctuate very widely with general business conditions. On the other hand, manufacturers of cigarettes, cereals, carbonated drinks, tooth paste, and similar nondurable consumer goods may enjoy considerable relative stability. Because of the possible combination of rather large and specialized fixed asset requirements with reasonably stable earnings, it is not uncommon to find some manufacturers making fairly heavy use of long-term debt, but almost never to the extent that it is employed by the utilities. One basic difference in the financing of all manufacturing establishments that sets them apart from those of utilities is that growth can be accomplished on a much more gradual basis. Earnings vary greatly among companies and with the stage of the cycle. The successful companies tend to rely chiefly on retained earnings, which may be high during periods of prosperity in the absence of regulation. Debt may be incurred to meet a need for unusually rapid growth, but with the expectation that it will later be repaid from earnings, or possibly from depreciation funds.

Indust.
Lever.

Aside from the type of economic activity engaged in, the size of the individual business unit has some bearing upon the type of long-term financing used. One of the reasons is that there is a relationship between such size and durability of the enterprise. A large business is usually protected by a momentum that will carry it through temporary economic storms, whereas a small business is usually lacking in sufficient financial and customer support to see it through very much adversity. Continued success is too dependent upon the health and abilities of a single individual. Because of this more impermanent nature of small business on the average, long-term credit is not commonly associated with it as a basic source of financing help. There are individual exceptions to this statement,

but in the main it holds true. So when credit is more than short-term, it is likely to be only intermediate-term, like the term loan. Or the loan must be secured by some long-lived asset, such as real estate, the value of which is not dependent upon the success of the business which uses it.

The form of business organization is still another basis upon which variation in the use of long-term credit will be found. Here the reasoning is again related to the factor of relative permanence. In the case of proprietorships and partnerships, for example, the business, or at least the personal basis for a loan, might be terminated at any time by death, sickness, or some other unpredictable cause. With a corporation, however, the business can continue despite any accident that might befall the owners or managers. And since the creditors originally could look only to the business properties for protection to their loan, the protection of these properties is all that matters. There are instances in which partnerships have floated bond issues, but such cases are very rare. The small amount of long-term borrowing done by these personal forms of business organization is mainly limited to single notes executed with a close associate or relative. Bond financing is so suited to and common with corporations, as opposed to proprietorships and partnerships, that such bonds are usually treated and discussed as corporate instruments, although technically they are not.

It is true that a small corporation might have greater difficulty in securing a long-term credit than a proprietorship or partnership of comparable size because, even though incorporated, the business might still be wholly dependent upon the welfare of the individual owner-manager, and yet the limited liability feature restricts the recourse of its creditors in case of default. In other words, if the business properties alone are not sufficient to justify the extension of the loan to the corporation, it is common for the owner to endorse the note and thereby nullify the limited liability restriction for that one debt. Long-term borrowing does not constitute an important source of funds for such incorporated businesses, however, for the same reason that it is not suited to the personal forms of organization.

Principal Means of Obtaining Long-term Credits

It was suggested in an earlier section of this chapter that long-term credits may be obtained either by direct negotiation with the lender or by public sale of a bond issue. There are, however, further differences in the ways in which these two basic arrangements might be carried out. In borrowing by direct placement with institutional investors, the borrower may or may not make use of specialized agents. If the business is a

regular borrower from a life insurance company or commercial bank, it may originate the deal itself without soliciting outside aid of any sort. These institutions, furthermore, sometimes have new business departments which develop new customers and arrange for the loan negotiations directly. If a business is seeking financing aid through the direct placement approach for the first time, however, it may call on the help of an investment banker. This intermediary will locate institutional investors willing to enter into such a loan arrangement and help the two parties negotiate on the terms of the loan. In return for his services, the banker will be paid a fee by the borrower.

When a business wishes to borrow on long-term account by a public bond issue, it will almost invariably use the "investment banking" approach. Some public utilities particularly have been known to peddle their securities direct to their regular customers or the general public, but this is an exceptional situation. The problems associated with the whole operation of a bond flotation are much too specialized to be successfully handled by the management of the ordinary business. The attitudes and current developments in the investment market must be recognized. The general level of interest rates must be understood, together with the probable direction in which they are likely to move in the near future. The many legal requirements must be satisfied. And finally, a specialized sales organization is required if economical and thorough distribution is to be obtained. A marketing agency that serves many businesses in this way is able to develop the specialized skills necessary to do an efficient job. The individual borrower seeking funds only intermittently is not in a position, as a rule, to handle this job as inexpensively and expertly as the specialist.

The initial step in floating a bond issue is therefore obtaining the services of a reputable investment banking firm. Together the borrower and the banker will work out the details of the issue so as to realize the greatest possible acceptance in the market at the least possible sacrifice to the company. It is at this point, as noted above, that the familiarity of the banker with the investment market proves of great value.

Once the details of the issue are agreed upon, arrangement is then made for its sale to the public. There are two general procedures that may be followed. First, and most common, the banker might agree to buy the whole issue at a discount from the expected sale price, with the intention of reselling it to investors. This is known as the "underwriting" approach. The gross income to the banker for his services is the difference between the price he pays for the securities and the price he receives from the public. In technical jargon, it is known as the "gross spread." Under this arrangement, the investment banker assumes the risk of inadequate

market acceptance. Losses on a single unsuccessful issue can wipe out the net profits on many successful issues.

The other procedure available is to make use of the sales organization of the investment banker on a commission basis rather than make an outright sale of the entire bond issue as described above. This is known as the "selling agent" or "best efforts" method, meaning that the banker does not assume the risk associated with the distribution of the issue but agrees to use his best efforts in the sale of the bond. Such a procedure may be employed in two very opposite situations: (1) an issue, such as a common-stock issue, may have so uncertain a market that the banker will not attempt its distribution on any other basis; (2) the company may be in such a secure position that it is willing to assume the risk of failure of price decline in order to save a part of the investment banker's ordinary gross spread. Ordinarily, in the latter case, this saving is so small that the borrower prefers to pay and have the assurance that the banker will assume the risks of completing the job successfully.

When an issue of securities is underwritten, a syndicate of investment bankers is often formed by the originating house for the purchase and sale of the securities. In this way, all members become a party to the purchase contract, and the risk is shared. The larger the issue, the greater the likelihood of such a syndicate arrangement. The banker responsible for the origination of the issue will generally become the manager of the syndicate operations and receive a special fee for his services payable out of the gross spread.

Sometimes the underwriter of an issue is chosen on the basis of "competitive bidding" rather than private selection. In such a case, investment bankers wishing to have an opportunity to underwrite an issue submit sealed bids of the price and coupon rate they are willing to offer, and the lowest bidder is chosen.

The whole question of competitive bidding has aroused substantial controversy. Some contend that it is the only way to achieve economical public financing. Others maintain that the relationship of issuer to investment banker is one of professional trust analogous to that of a patient and his doctor and that the service cannot be put to a monetary test alone. In some fields vested with very acute public interest, such as the utilities, bidding is required by law. Probably the best position to be taken on the controversy at the present time, however, is that in cases where the risk attached to the issue is low and the whole flotation is more or less a perfunctory matter, the cost of the underwriting becomes the paramount consideration and competitive bidding is called for. However, where risk is reasonably high, continued relations with the issuer are to be expected, and the whole arrangement has to be tailor-made to fit the circumstances

involved, private selection of the investment banker, with its associated close professional relationship, is to be preferred.

From what has been said it should be clear that the "investment banker" is not a banker in the popular sense of the word. He is, instead, a merchant seeking to make a profit from the successful purchase and sale of merchandise (in this case stocks and bonds) rather than from the shrewd investment of his resources in the securities of other companies. He buys securities, not to realize income from them, as do commercial banks or savings banks, but rather to resell them at a higher price. As with any merchant he is dependent upon rapid turnover of his investment in the securities he acquires.

In the case of real-estate mortgages, the "mortgage banker" performs much the same merchandising functions as the investment banker does in the bond and stock field. He maintains relations with institutional investors and others interested in investing in single mortgage notes. At the same time he cultivates relations with would-be borrowers. By making an economic and financial analysis of their position and helping them formulate an acceptable type of loan agreement, he facilitates the negotiation between borrower and lender. In addition, he may continue to serve the creditor after the loan has been arranged by keeping informed on such matters as taxes and insurance and collecting and remitting interest and principal installments. The main difference between the mortgage banker and the investment banker underwriting a public issue is that the former does not assume a risk in connection with the placing of the loan but acts as a broker. His work is like that of the investment banker, who merely acts as an intermediary in a direct placement or as a selling agent for a public offering that is not underwritten.

In reviewing the material of the preceding paragraphs, several approaches that may be followed in obtaining long-term credits can be noted. They are best summarized and illustrated by the following outline:

- I. Direct negotiation with lender
  - *A.* Where lender is a personal associate
  - *B.* Where lender is a financial institution (private placement)
    1. With the services of an intermediary
    2. Without the services of an intermediary
- II. Public sale of a bond issue
  - *A.* Without an investment banker
  - *B.* With an investment banker
    1. On a commission or best efforts basis
    2. On an underwriting basis
       - *a.* By private selection
       - *b.* By competitive bidding

Decision of which approach to use rests on a number of different considerations. The small business usually is obliged to offer some pledge of property with permanent value for a long-term credit because of its size and possible impermanence. While such a mortgage loan may be negotiated directly by the business with some lender, it is probably most often handled by a local mortgage banker who knows the lenders and their credit standards. Probably the bulk of these loans is absorbed by life insurance companies, although savings banks and some commercial banks are interested. Sometimes a department of a commercial bank will serve as the mortgage banker.

The middle- and large-sized business is more likely to sell a bond issue, which may be either secured or unsecured. Here, too, the issue may be sold directly or through an intermediary, serving either as a selling agent or underwriter. If the issue is placed with one or a few institutional lenders and not publicly offered, a "direct placement" is accomplished.

The special services of the investment banker are most fully used in the bond issue that is underwritten and sold publicly. These services have been grouped under four functions, namely, buying (or origination), banking, risk bearing, and selling.[8] The buying function includes the investigation of the issuer, the analysis of the investment market, and the formulation of the terms of the loan agreement. The banking function consists in providing the financial backing which enables the issuer to be paid his proceeds prior to the sale of the issue. The risk-bearing function is, in one sense, the distinguishing feature of the underwriting approach, in that the investment banker assumes the risk associated with the market acceptance and relieves the borrowing business accordingly. And the selling function involves the organization of the sales force and campaign for the marketing of the issue to the public and institutional investors. Since successful performance of all these functions is an involved task, it is also costly; therefore the public sale of bonds by means of the standard underwriting approach is necessarily limited to issues which are large enough to permit sufficient spreading of the total dollar cost so that percentagewise it may be very small.

When an issuer uses the selling agent method, he secures specialized assistance in the performance of the selling function, but nothing else. The well-known marketing adage, "You can eliminate the middleman, but you cannot eliminate his functions," assumes special significance here. The functions of risk bearing, banking, and origination must continue to be performed by the issuer. If the issue is comparatively small, the money not urgently needed, and the probability of market rejection very

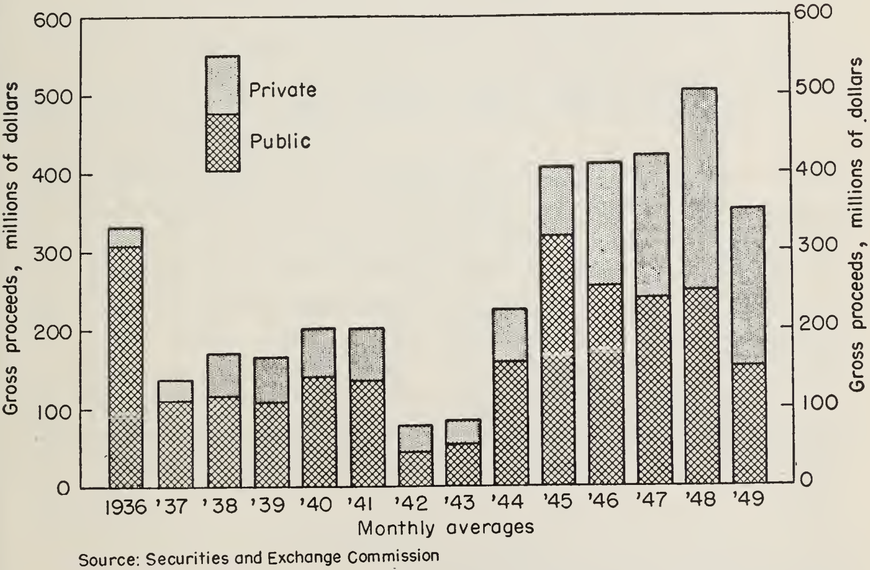
[8] See H. G. Guthmann and H. E. Dougall, *Corporate Financial Policy* (New York, Prentice-Hall, Inc., 1948), pp. 290–293.

slight, then the assumption of such functions is reasonable as a means of holding down costs of floating the issue. The only function that the private business cannot perform successfully in such a case is that of selling the issue, and so the employment of a selling agent on a commission basis becomes especially advisable. If direct placement of the issue is both possible and desirable, the investment banker might even be eliminated entirely. Sometimes a business finds itself in just the opposite situation: it would like to employ an underwriter and thereby avoid all functions, but the risks attached to the issue are so great that no investment banker is to be found, or else the charge for obtaining one would be exorbitant. Such an issuer is forced to use the selling agent approach.

Despite the advantages to be gained from underwriting an issue, the direct placement method has increased greatly in importance over the past several years. Exhibit III below supports this statement. Several

Exhibit III

Corporate Bond Offerings Publicly Offered and Privately Placed



reasons can be given for this trend. In the first place, securities directly placed with a few investors are exempt from compliance with the Securities Act, and therefore a substantial saving in cost of issuance may be accomplished. In the second place, institutional investors, particularly insurance companies, have experienced a rapid increase in the funds placed at their disposal. This has encouraged their actively seeking different worth-while investment mediums to the point where they have even

given impetus to the direct placement method. In so doing, the usual investment banking functions are short-circuited to the mutual benefit of both investor and issuer.

Another advantage of the direct placement approach is that the risks of changing bond-market conditions during the waiting period incident to registration are also avoided.[9] Despite all these considerations, however, the underwriting approach still holds its own where the issue is too large to be handled by a few investors or the issuer desires dispersed public sale for the sake of prestige, public relations, or avoidance of the possibility of outside institutional dominance. Statistical evidence of the relative importance of the various approaches outlined above over the years 1935 to 1949 is provided in Table 2.

TABLE 2

NUMBER OF NEW SECURITY ISSUES BY TYPE OF TRANSACTION, 1935 TO 1949

Item	Bonds [a]		Preferred		Common		All securities	
	No. of issues	Per cent of total [b]	No. of issues	Per cent of total [b]	No. of issues	Per cent of total	No. of issues	Per cent of total [b]
Totals	3,215	100.0	973	100.0	718	100.0	4,906	100.0
Public sale . . .	1,432	44.5	887	91.1	694	96.7	3,013	61.5
Underwritten:								
Private selection . . .	856	26.6	706	72.6	438	61.0	2,000	40.8
Competitive bidding . .	502	15.6	89	9.1	32	4.5	623	12.7
Selling agent .	32	1.0	47	4.8	62	8.6	141	2.9
No investment banker . . .	42	1.3	45	4.6	162	22.6	249	5.1
Private placement	1,783	55.4	86	8.8	24	3.3	1,893	38.6
With intermediary . .	818	25.4	52	5.3	6	0.8	876	17.9
Without intermediary . .	965	30.0	34	3.5	18	2.5	1,017	20.7

[a] Including mortgage bonds, debentures, notes, etc.
[b] Because of rounding, figures do not add to the total.
SOURCE: Adapted from table published in *Barron's Financial Weekly*, Vol. 30, Nov. 27, 1950, p. 5.

One important aspect of this table should be noted and elaborated upon. The last column showing the percentage breakdown of the total

[9] For a most effective development of this point see E. Raymond Corey, "Corporate Financing by Direct Placements," *Harvard Business Review*, Vol. 27, No. 5, November, 1950, pp. 67–76.

figures indicates that public sale during the 15-year period accounted for 61.5 per cent of the new issues and private placement only 38.6. This distribution is due to the heavy weighting of the early years in favor of the public sale. As Exhibit III has already indicated, recent years have seen a much heavier reliance upon private placement, and had a shorter period of time been covered prior to 1949, the proportion of total issues would have been much more in favor of this approach.

Public Regulation of the Long-term Credit Market

The most important form of regulation for the business borrower is found where securities are publicly offered. Such regulation consists of the so-called "blue-sky laws" found in most states, and the Federal Securities Act, Securities Exchange Act, and Trust Indenture Act. The state laws are created under the general police power of the sovereignty and may provide for disclosure of information about the issuer, prevention of fraud, and sometimes an evaluation as to whether the issue is "speculative" or not before any public sale is permitted. In such cases, authority rests with a commissioner, who relies upon specific information required to be filed by the issuer. Control over fraudulent security practices is further provided for in most of these statutes by the requirements that dealers and brokers in securities be licensed by the state before they engage in security transactions.

Until 1933 the Federal government had remained out of the regulation of security issues, save as it was occasionally called upon to deny the use of the mails for fraudulent purposes *after* trouble had arisen and a complaint been made. In that year, however, the Securities Act was passed, which aimed at protecting the investor by requiring full disclosure of all vital facts bearing upon certain new security issues. Unlike the blue-sky laws, this statute does not provide for any governmental evaluation of the soundness of a security but rather relies upon the assumption that in requiring full disclosure and in making such pertinent facts available to potential investors, fraudulent issues will be discouraged.

A particular issue may be denied the right to be offered to the public but only on the basis of omission of a material fact or error in disclosing a material fact. Once the errors and omissions have been corrected, the issue cannot be withheld from the public regardless of its nature. Nevertheless, publication of the unsavory record of promoters, as where they have been subject in the past to convictions of fraud, or facts about the profits which the promoters would make through the sale of securities have been effective in discouraging downright fraud. The law is not intended to prevent the sale of securities merely because of their risk.

Evaluation of that risk is still left to the purchaser of the issue. However, the Act provides criminal and civil penalties in the event of willful violation subsequently disclosed.

Not all long-term credit instruments of private business are subject to the law. Issues smaller than $300,000 are exempt, as are those of banks and railroads. And as indicated earlier, the law does not apply to credit instruments placed privately, but only to those sold to the general public.

In 1934 the Securities Exchange Act was passed by Congress and extended the Federal regulation of security transactions in several ways. In the first place, full disclosure is required of all securities listed on national exchanges. This increases the coverage of the full disclosure requirement established in the Securities Act. Second, it regulates the practices on these exchanges by subjecting them to federal licensing. Third, it governs certain practices of security brokers and dealers subject to the law. And finally, it provides for control over the purchasing of securities on credit. This latter provision, however, restricts the freedom of the creditor rather than the debtor.

The Trust Indenture Act of 1939 was aimed at giving greater protection to individual creditors under a bond issue by requiring the trustee of such an issue to be strictly a disinterested third party and held to certain responsibilities in the execution of his duties. In addition, minimum standards are established with respect to the terms of every indenture subject to the regulation,[10] and certain minimum essential information has to be furnished to bondholders by the trustee from time to time. The law is aimed at preventing practices which have been brought to light whereby the creditors to a bond issue do not have their full rights protected because the trustee, for one reason or another, is favorable to the issuer and does not assume his full responsibility in protecting the interests of the bondholders.

Except for the provision in the Securities Exchange Act controlling the purchase of securities on margin (*i.e.,* part down and the remainder on credit), the administration of the three Federal acts has been placed in the hands of the Securities and Exchange Commission, more familiarly known as the SEC. The provision regulating margin requirements has been assigned to the Federal Reserve Board, now known as the Board of Governors of the Federal Reserve System.

Summary

Long-term credit is a basic source of business financing. Its use, however, varies widely by type of business, size of business, and form of legal

[10] All indentured debts required to be registered under the Securities Act of 1933 had to conform with the regulation.

organization under which the business operates. If the asset requirements are relatively large in amount and the earnings are reasonably stable, this method of financing a portion of the permanent asset requirements may be very sound. Its principal advantage in such a case would be lower cost and avoidance of recurring principal maturity. Its particular drawback grows out of its legal character as a contractual obligation, together with its long-term nature: the danger of default on the fixed periodic interest charge.

Borrowing on long term may take one of several forms. It may be represented by a simple note instrument negotiated with a relative or friend; it may be a much more formal document, entered into with one or a few institutional investors; or it may take the form of a bond issue. If the latter form is adopted, distribution may, in turn, follow one of three procedures: direct sale by the issuing business, sale on a commission basis through a selling agent, or sale through an investment banker under an underwriting contract. The choice of form and method should rest on such matters as availability of sources to the particular business, comparative costs, and the comparative advantages of dealing with a small number of creditors as opposed to widespread distribution. In every case the borrower should seek competent legal advice to allow for the requirements established by state and Federal statute.

Questions

1. What are the different arrangements by which long-term credits might be accomplished?
2. Why should a business ever finance part of its asset requirements by long-term debt?
3. What generalizations might be made from the evidence of the use of long-term credit in the past?
4. What is a bond? Is it strictly and wholly a corporate instrument?
5. What are the principal methods of obtaining long-term credit? (The student should try to reproduce the main points of the outline provided in the chapter by drawing on his own reasoning and understanding rather than by merely referring back to it.)
6. What factors probably account for the increased importance of private placement in the last two decades?
7. Why is an investment banker not a "banker" in the usual sense of the word?
8. Describe the standard way by which a public issue would be handled through an underwriting agreement.

9. What are the pros and cons to competitive bidding in underwriting a bond issue?
10. What is a best efforts commitment? How does it differ from an underwriting contract?
11. What are the principal ways in which the sale of bonds is subject to public regulation?
12. How do the state laws differ from the Federal?

Chapter 20. BORROWING ON THE BASIS OF LONG-TERM CREDITS: TYPES OF BONDS

Whereas the last chapter was concerned with the more general considerations underlying the use of long-term credits, the present one will describe the various types of bond instruments which are found in practice. The purpose of the chapter, however, is not merely one of parading factual information but rather of illustrating, by reference to the different contractual provisions, financial arrangements that might be made in any long-term indebtedness to serve the wishes of the borrower or meet the requirements of the lender.

Because of the wide variety of bonds found in the market today the danger in attempting such an exposition as this is that the reader will be left confused and unable to determine any apparent unity to the individual forms. In order to avoid this danger, he should recognize that bonds ordinarily differ on the basis of one or more of three essential provisions of the underlying indenture: (1) those which pertain to type of security, (2) those which cover the manner of participation in earnings, and (3) those which bear upon the manner of retiring the obligation. The following outline arranges the more common bond types as they relate to these three points.

Classification of Bond Instruments by Major Contractual Provisions

I. Type of security
  - *A.* Earnings and general unpledged assets of issuing company (debentures)
  - *B.* Earnings of issuing company plus pledge of specific property (mortgage bonds)
    1. Real-estate mortgages (senior and junior liens)
       - *a.* Closed-end issues
       - *b.* Open-end issues
    2. Chattel mortgages
  - *C.* All or some of original security plus general credit of another company
    1. Assumed bonds
    2. Guaranteed bonds
  - *D.* Combined earnings of allied companies plus collateral protection in some cases (joint bonds)

II. Manner of participation in earnings
  A. Fixed contractual interest rate (the common arrangement)
  B. Fixed contractual rate with payment contingent upon earnings (income bonds)
  C. Fixed contractual rate with participating feature
    1. Participating bonds
    2. Convertible bonds
    3. Bonds with warrants
    4. Bonds with junior security attached (package or block sale)

III. Method of retirement or repayment
  A. Repayment of full principal on set date
  B. Repayment of principal on periodic basis
    1. Serial bonds
    2. Sinking fund bonds
  C. Either (*A*) or (*B*) with possibility of advance retirement
    1. Callable bonds (discretion rests with issuer)
    2. Convertible bonds (discretion rests with bondholder)
  D. No set maturity date (perpetual bonds)

Bonds Classified by Type of Security

One of the commonest bases for classifying bonds is the character of the security underlying the credit. The principal backing to any long-term indebtedness is the earning power of the issuer. Where, for one reason or another, there is uncertainty surrounding the reliability of this factor, then there might be added a collateral factor whereby the credit is further protected, in event of default, by the pledge of some specific property.

It has already been established in the discussion on short-term credits that the type of property used for such a purpose might vary considerably. Also, for such collateral protection ordinarily to have any real meaning it must be of a general use character and thereby enjoy economic value outside of the particular business making the pledge. The value of a lien depends entirely upon the independent value of the pledged property in the event of liquidation or the priority which the lien gives the claim with respect to earnings where reorganization of the business rather than liquidation occurs.

This reasoning makes it possible to establish the following two principles as given: (1) Where the earning power of a business is sound and reasonably reliable, collateral security is of little or no value to a creditor, for it can add nothing to the basic position of the credit. (2) When needed for added protection, a specific pledge is chiefly reliable if it is based upon property having usefulness outside of the business of the particular bor-

rower in order to be assured of a market value in case of forced liquidation, unless the business is a kind that is prevented from liquidating and then the pledge serves as a bargaining point in the event of reorganization.

The bond which does not carry a provision for collateral security is called a "debenture." Although these bonds are technically referred to as "unsecured," in a broad sense this is not so, for they rest upon the unpledged asset values, or general credit, and the earning power. Such bonds where small in relation to assets and earnings may be issued by a corporation which has given no liens to any long-term creditor and enjoy excellent investment standing. Many major industrials have sold such bonds at low interest rates. On the other hand, debentures may be issued by a business which has been forced to pledge its assets in the past and now is without further recourse along this line. Such situations are exceptional now but at one time were found chiefly among the railroads and utilities. The debentures they issued under these circumstances ranked after the mortgage bonds in quality. The tendency in recent years, however, has been for the corporation to work toward debt simplicity—one large bond issue, either unsecured or secured by a first mortgage. Perhaps the most interesting exception in recent years has been the relatively small number of serial debentures issued by some utilities. Such obligations were originally sold in a market where commercial banks were searching avidly for suitable commitments and have actually sold at yields lower than the mortgage bonds of the same company because of their short maturity and satisfactory safety outlook.[1]

The bond which carries a collateral security provision is known as a "mortgage bond." It is not our concern to delve into the legal niceties of the provision; suffice it to say that a right of legal action in case of default is provided whereby the creditor may recover part or all of his claim out of a foreclosure sale of the specific property. If the proceeds of the sale are deficient for the purpose, the residual claim ranks equally with all other general creditors against the unpledged properties. If the proceeds are in excess of the claim, on the other hand, the surplus is applied to the claims of unsecured creditors. There are any number of mortgage issues, however, which differ upon such things as the type of property used, the seniority of the claim, and the coverage of the provision. Each of these points of difference will be discussed briefly in the following material.

The specific property pledged may be of two general types, (1) land and property attached to the land (real estate) or (2) personal and

[1] For a more thorough discussion of the situations in which debenture bonds are often used, see H. G. Guthmann and H. E. Dougall, *Corporate Financial Policy*, 2d ed. (New York, Prentice-Hall, Inc., 1949), pp. 138–139.

movable property (chattels). Most collaterally secured bonds rest upon real property and are simply known as "mortgage" bonds. Where the security is chattels, the bond title may reflect the nature of the pledge, as in the case of "collateral trust" bonds (secured by stocks and bonds), or may have a vague title, such as "chattel mortgage" bonds, which leaves the investor to discover the exact nature of the pledge by further study.

Occasionally there may be created a number of separate claims having a sequence of priority. For example, there may be first mortgage bonds, second mortgage bonds, and third mortgage bonds. In case of default, the first mortgage bonds have prior claim to the proceeds from the sale of the asset pledged. If an excess remains after full settlement of this claim, then the second claimants are paid in full, and so on, until all claims are fully satisfied in their respective order or the proceeds are used up, whichever is first. In practice junior claims rarely go beyond the second or third stage. The bonds having prior claim are alternatively referred to as being "senior" or "underlying" bonds. The others are correspondingly spoken of as being "junior" or "overlying." The terms senior and junior have reference, of course, to the order of the claim. Underlying and overlying convey the same idea by suggesting nearness to the property pledged.

Another feature of the mortgage contract with which the student of finance should be familiar relates to whether it is "closed" or "open." The ordinary, conventional mortgage bars any further subsequent debt from being equally secured by the pledged property. Such an issue is known as a "closed-end mortgage" and may be severely restrictive if the property so pledged is a dominant part of the total assets of the borrowing company. It may make it difficult for a rapidly growing business using mortgage bonds to finance. With a closed-end mortgage already outstanding, the company could give only a first lien on new property and a junior lien on its previously pledged older properties for new money. It was this type of financing during the growth period of the railroads which left them with complex debt structures: scattered first mortgages on different parts of the system and a variety of liens, first, second, and third mortgages, on major lines. Since the 1920's simplification has been in process as the railroads paid off some issues at maturity and reduced the number of other issues by refinancing and reorganization.

In order to avoid this complexity, an *open-end mortgage* has been characteristically used by the younger utilities, notably the electric, gas, and telephone companies, and in recent years by the railroads. (Actually, many roads adopted the idea quite early, but with a huge debt, mostly noncallable, it has taken decades to make the shift to the simple open-end bond.) This provision permits successive bond issues to be made under

the original mortgage with the same security, provided the other protective covenants of the indenture are observed. The result is that a corporation using this provision may have a number of separate bond issues all secured by a single first mortgage. The maturity dates and the coupon rates on these various issues may vary, but their security is the same. To distinguish them, they are often referred to as different series, thus Series A, Series B, etc.

Under such an arrangement there is a potential danger to the early creditor of subsequent dilution of the collateral protection unless safeguarded in some manner. These safeguards are generally forced by market dictates and may take several forms. There may be an absolute ultimate limit, as where the original issue amounts to, say, 20 million dollars and the open-end feature is operative on the first 40 million dollars of principal value. But the more sensible and common arrangement is for the limit not to have any predetermined dollar amount but rather to have it related to the value of the pledged assets or the earnings, or both, in some fixed ratio. As an example, the open-end provision might restrict the aggregate amount of mortgage debt to not more than 60 per cent of the net fixed assets and the total interest on the debt to 50 per cent of the net earnings after taxes.

Another type of safeguard often found is the "after-acquired clause," which provides that all fixed property acquired subsequent to the creation of the indenture shall automatically become a part of the collateral backing and thereby add to the original security. At times, however, the after-acquired clause has been included in a closed-end issue, and then the feature may become burdensome. It is not uncommon to provide in such cases that the corporation be permitted to acquire additional property by giving the vendor a "purchase money" mortgage as part payment which will be a first lien on such after-acquired property. In the absence of such a provision, or where the program of expansion was large, a corporation has been known to refinance its whole closed-end debt to give it suitable low-cost mortgage money.

The most common types of personal property used under chattel mortgages are stocks and bonds and operating equipment. When a bond issue is collaterally secured by stocks and bonds, it is commonly referred to as a "collateral trust bond." Although the security document primarily used in connection with such bonds is not strictly of the mortgage type, the effect of the pledge is nonetheless the same. That is to say, from a strictly legal standpoint collateral trust bonds should not be classified as a form of chattel mortgage, but from a financial standpoint such treatment is appropriate.

The stock and bond collateral is deposited with the trustee, but dividend or interest payments and any voting rights that might exist accrue to the benefit of the debtor corporation as long as it is not in default. The securities pledged may be issues of other companies owned by the borrower, or they may be senior securities of the issuing company itself. The reason for this latter arrangement is that the company may not want to sell its senior securities to the public because of some unfavorable provision in the original indenture, particularly a deficient coupon rate, which would cause the bonds to sell at a discount, and so uses this original issue as backing to a new collateral trust issue.

Equipment obligations, that is, instruments collaterally secured by operating equipment, predominate in the public transportation field, where the rolling stock is the principal type of asset. Because of the strategic importance of this equipment, these instruments enjoy a very high investment rating, particularly in the railroad field. The rolling stock is not only vital to the debtor railroad's operations but can be used by other roads and therefore enjoys that outside market support which was cited above as being essential to worth-while collateral.

Although some of these equipment obligations fall strictly in the chattel mortgage category, many more do not. Instead of having the backing of a mortgage provision they are either secured by a conditional sale contract or are issued under a trust arrangement whereby title rests with a trustee and the individual "creditors" are really beneficiaries or owners of the trust. Since these "equipment trust certificates," as they are called, enjoy the same investment character as an equipment mortgage bond and are the more common form of equipment "obligation," they are invariably included in any discussion of chattel mortgage bonds.

Some bonds, whether of the debenture or mortgage types, may enjoy the credit support of someone other than the issuing corporation. For example, a corporation may go out of existence as the result of a sale of its assets to or a merger with another company. As an incident to this sale or merger, the surviving corporation becomes liable for the bonds of the deceased corporation. The obligations of the latter become the "assumed" bonds of the survivor. They remain unchanged in form and will continue to enjoy the protection of any mortgage lien originally given.

A "guaranteed bond," on the other hand, remains the obligation of the issuer, but its position is further protected by another company, which agrees to guarantee, that is, to assume responsibility for, the paying of interest and principal in event of default. In this case there is no change in the status of the debtor company; the backing of another company is merely for additional protection.

A few bond issues are the obligation of more than one company. Such a situation arises when a single piece of property is acquired and used by several independent companies in common. Depots and terminal facilities of railroads offer the best example. Under such circumstances a single bond indenture may be created in which the several companies bind themselves as debtors and the property is pledged as collateral security. The name "joint bond" is applied to this type of issue.

Bonds Classified by Method of Participation in Earnings

Another basic point on which bonds differ in practice is the means by which they participate in the earnings of the issuing company. The commonest arrangement is for the contract to carry a fixed annual rate of interest payable on prescribed dates, usually six months apart. Thus an indenture might provide for a coupon (or contractual) rate of 4 per cent per annum to be paid semiannually on March 1 and September 1 every year during the life of the agreement. This would mean that 2 per cent of the face (or par) value of the bonds must be paid on these dates without fail if default and resulting court action are to be avoided.

The method by which this periodic interest (and principal) is paid is the basis for a very broad classification of bond types. The commoner arrangement in business practice is for the bond instrument to be made out to bearer and to be fully negotiable. Each bond has attached to it the necessary number of interest coupons, which are promissory notes in themselves, and are "clipped" at the time each is payable and collected through a bank in much the same way as a check. These bonds are known as "coupon bonds." The other arrangement is for the owner of the bond to have his name recorded on the transfer books of the company and to receive payment for interest and principal by checks drawn in his favor and sent to him by mail. This type of issue is referred to as a "registered bond." Initiative for the creditor's receiving principal and interest rests with the holder of coupon bonds and with the issuer of registered bonds.

Occasionally a type of bond is used which is known as an "income bond." Its interest payment is contingent upon the net income of the debtor being earned in sufficient amount to permit payment. Should such income be insufficient to provide for the full contractual interest payment, no legal default results as with the fixed interest bond. However, the contingency provision usually carries with it a cumulative feature which requires that whatever part of the interest payment is passed is carried forward to the future claim of the creditor and must subsequently be paid whenever the earnings of the company justify. No payment to a junior

security is permitted until this arrearage has been settled. Also, to avoid any dispute as to when an interest claim is payable under the terms of the contract, the net income to be used for the purpose will be carefully defined in the indenture. In some situations, for example, net income before depreciation may be appropriate, and in others a reasonable allowance for depreciation would be in order. Where net before depreciation is used, the directors may be allowed to use some stipulated part of the net income for replacements or improvements ("capital additions") before paying interest.

Another general type of bond is one which stipulates a fixed coupon rate but then provides a method of receiving additional income over and above this minimum sum. The most direct, but least common, way of achieving this end is by means of a "participating bond." Here the bondholder is allowed some prearranged participation in earnings above the stipulated rate. The type is so rare that further elaboration is not in order.

The commoner forms of participation are accomplished by indirection. For example, in the case of a "convertible bond," the holder is given the option of converting his investment to a junior position—usually common stock—at his own discretion. Thus he is given the opportunity to participate in a favorable earnings position should this materialize subsequent to his purchase of the bond. There are, of course, some limits to his freedom of action. The conversion privilege will be operative only within specified dates. Also, a set rate of exchange or conversion is established in the contract. Often the time limit and conversion rate will be tied together so that there is an adverse relationship between the passage of time and the convertible privilege so far as the bondholder is concerned.

To illustrate: Assume a $1,000, 20-year bond is dated July 1, 1950, and is convertible into the common stock of the company on the basis of the following schedule:

Jan. 1, 1951–Jan. 1, 1955	. . .	10 shares for 1 bond
Jan. 1, 1955–Jan. 1, 1960	. . .	9½ shares for 1 bond
Jan. 1, 1960–Jan. 1, 1965	. . .	9 shares for 1 bond
Jan. 1, 1965–Jan. 1, 1970	. . .	8½ shares for 1 bond

The most advantageous conversion ratio is during the first 4 years, following an initial 6-month waiting period, and deteriorates thereafter by ½ share every 5 years, the full privilege expiring 6 months before the maturity of the bond.

A very common arrangement is for the exchange ratio to be expressed in dollars rather than shares as illustrated above. For example, the provision might read that the bond is convertible into one share of common

stock at $100 of principal value of the bond, which would mean that a $1,000 bond could be converted into 10 shares of stock. In any case, the decision to convert rests solely with the bondholder, who stands to gain if the return from the junior security is sufficiently better than that of the bond to compensate for the greater risk of investing in stock instead of bonds.

A conversion privilege may be offered by a company whose credit standing is not sufficiently strong to permit economical borrowing otherwise. By including a conversion privilege in the contract, creditors can be encouraged to invest in the bonds at a rate below what would ordinarily be required. The company, in turn, saves on interest. It does so, however, only at the possible cost of seeing the earnings per share of the common diluted at some future time when the bonds are converted into common. It is possible, on the other hand, that a corporation of excellent credit standing might employ the convertible bond if the exchange into stock in the future would be at a higher price than could be realized for the shares if they were sold for cash immediately.

Another indirect participating arrangement somewhat similar to the conversion privilege is the offering of "warrants to purchase" equity securities of the issuing company at a stipulated price. At the time of original issue this price at which the equity shares may be bought is above the market price prevailing. If the company proves successful and the market price of the stock rises above that set by contract, these warrants may then become a real source of profit to the holder, either by sale or by exercise of the right.

There are two general forms that this arrangement might take. The warrants may be issued as separate instruments along with the bond, or they may be attached to the bond. If the latter, they may in turn be "detachable" or "nondetachable." A detachable warrant has the character of a separate negotiable instrument and may have a market value of its own. Exercise of the warrant, accordingly, has no effect upon the bond instrument. The nondetachable warrant clearly can have no market of its own, and to be exercised the whole bond instrument must be turned in. When the new stock certificates are issued, the bond is returned.

As with the conversion privilege, the stock purchase warrant gives the holder of the bond the possibility of benefiting from favorable earnings growth. Unlike conversion, however, additional money must be put up in exercising this option. Also, the junior security may be obtained without sacrifice of the bond. This latter possibility is what makes the whole arrangement especially tempting: one may participate in future speculative profits without having to give up his preferential investor position.

While discussing these forms of bonds that attract funds by offering some *participation* feature that gives a hope of profit beyond the stipulated interest rate return, it is appropriate to mention a simple arrangement that achieves a similar effect with more conventional securities. A young or speculative venture might find it necessary to offer bonds to get needed money but might find ordinary interest rates insufficient to attract capital because of risk. In such a situation every purchaser of a bond might receive in addition some shares of stock. The plan is known as a "package" or "block sale." The effect of this arrangement is to provide participation in earnings somewhat comparable with the plan of the participating bond, but it is accomplished without any such contractual provision. If earnings after interest and taxes are sufficient to justify dividend payments, the bondholders share in this distribution by virtue of their stockholdings. And even if the earnings are not distributed, the holder stands to benefit from price appreciation. The shares distributed might come from the corporation or, in the case of a small corporation, might be donated by previous shareholders. In some cases a small business might stipulate that no dividends would be paid until the bonds were retired and that salaries and drawings of dominant stockholders would be limited.

Whether it be accomplished by a specific contractual provision, a conversion privilege, the right to buy equity shares at a fixed preferential price, or accompaniment of equity shares with every bond purchase, the end result of these methods of contingent participation in earnings is to offer the bond buyer potential income in excess of the fixed contractual rate of interest. Naturally, such sweetening of the bond contract is not of the character of a gratuity. It is forced by prevailing circumstance of one sort or another which makes the bond uninviting as an investment without such opportunity for special gain. An expanding company not too well established from a profit standpoint but offering good prospects might favor such participation to the alternatives, which might be an excessive interest rate, or no loan at all, or a loss of some measure of control. Where the need is for equity capital to shore up the general credit of the company, a preferred stock might be employed instead of the bonds mentioned here.

Bonds Classified by Method of Retirement

The third major basis for distinguishing bonds is in connection with provisions for their retirement. Again, the standard arrangement is for the obligation to mature and the principal be repaid in whole at some definite place and set date. Instead of this, however, there may be pro-

vided a means of installment repayment, whereby the principal is repaid not in one lump sum but in periodic installments over the life of the obligation.

There are two ways in which periodic repayments may be accomplished. Under the "serial bond" arrangement a definite schedule of maturity dates is established. A certain portion of the bonds mature at specified dates until the full sum is retired. The dates are generally uniformly spaced, such as every six months or year. If the amount of principal payable each period is equal, the debt service will grow less as the interest payments decline with the shrinking debt. Or principal repayments can be on an increasing scale just sufficient to counterbalance the shrinkage of periodic interest costs so that their combined total will be constant over the life of the issue. When short-term interest rates are materially lower than bond yields, the shorter maturities of this type of serial issue will sell at lower yields and tend to lower the average interest rate for the total borrowing.

Provision for gradual repayment of a bond issue with a single maturity date can also be had through a "sinking fund." The indenture may include a provision whereby a certain sum must be provided annually for the retirement of bonds. The amount may be fixed in nature or contingent upon earnings. But in either case the specific part of the obligation retired is not established by any predetermined schedule. Actual retirement, rather, is accomplished by purchase in the open market or by call. The indenture ordinarily provides that the corporation or the trustee will be permitted to purchase bonds with sinking fund money when they are available in the market at not over the call price. When the market price goes higher, the job of calling bonds with any unused funds falls to the trustee. Occasionally issues are found which provide that sinking fund monies will be held in trust and invested in high-grade securities to provide for eventual retirement when the market price of the security descends to an appropriate level or the maturity dates arrives, or they will be returned to the company for reinvestment in operating assets.

If retirement under the sinking fund provision is to be accomplished by call, there must be included in the indenture a provision giving the corporation or bond trustee authority to exercise such power. The actual bonds called are then determined by lot, so that no buyer knows at time of purchase the exact date he may expect return of his principal. In order to compensate the investor for this uncertainty and the possible disadvantage of reinvestment at an unfavorable time, a premium is usually included in the call price. Thus, in the early stages of the loan term the call price might be, say, 105 and gradually decline toward par with the passage of time and the approach of final maturity.

The trustee is usually given the option of satisfying the sinking fund provision by open-market purchase or by call. He can thereby avoid paying a high call premium when the market price is low. Conversely, the right to call holds market price in check and keeps the trustee from having to pay excessive prices by virtue of a compulsory purchase provision. The sinking fund provision, besides providing for principal retirement, acts as a support to market price when it is exercisable through the market. The call price, on the other hand, holds market price down. Together they may serve to stabilize the price of a bond.

When the sinking fund clause permits the reinvestment of some part of the fund in improvements, it ceases to be a true sinking fund. It no longer "sinks" the debt. However, where the borrower is highly regarded, as in the case of many public utilities, the reinvestment of earnings in operating assets which maintain or expand the earnings base behind the bonds may be regarded as satisfactory and reduce the need of petty financing which would otherwise be necessary.

The call feature described above in connection with the sinking fund provision is a most common clause found in most corporation bonds of today. Formerly, noncallable bonds, especially in the railroad field, were not uncommon. The call privilege generally permits the corporation not only to repurchase its bonds for sinking fund purposes but also to call the whole issue for refinancing at lower rates when the improved credit of the corporation or a favorable bond market allows. That such refinancing can cost the bondholders and save the corporation substantial sums may be seen by the high market prices, far over par during the 1930's, of the minority of bonds which were noncallable. The premium over the conventional call premium measures the value of interest rate saving had the corporation been able to redeem and refinance at lower interest rates. On the other hand, when interest rates and bond yields rise in the capital markets, the bondholder is bound by his long-term contract to accept whatever rate is stipulated in his bond regardless of how low it may seem at a later date. At such times sinking funds are able to purchase bonds in the market at prices below par, which is one of the advantages to the corporation of the bond issue sold publicly over the term loan, the private placement, and the serial bond.

The call provision is also significant in that it may cut short the life of bonds which have a convertible feature or have nondetachable warrants. If a bond is called either for sinking fund or refinancing before the holder has found it profitable to exercise his privilege, he derives no profit from that part of the contract. Where the right does possess value at the time of call, that call forces the bondholder to take his profit or lose it ir-

revocably. Thus, if a 3 per cent bond were convertible at 100 into common stock which paid no dividends, he would not ordinarily convert. But if the earnings were so high that the common sold at 120 while the bonds were being called at 105, the call would force the holder to convert in order to avoid losing the $15 difference between the market value of the stock and the cash he would receive for each $100 par value of bonds called. Corporations sometimes force conversion at times when the market value of their common is sufficiently above the call price of the convertible bonds to be profitable. They may be motivated by a desire to reduce risk by debt elimination or to reduce debt preparatory to new financing. Rarely does the corporation save on the interest reduction illustrated above, since generally the dividends on the new stock will be more than the interest eliminated, especially after the increased income taxes are allowed for.

Similarly, the corporation can force the exercise of nondetachable stock purchase warrants when the stock is worth enough more in the market than the stipulated purchase price. Thus, if the warrants were to buy stock at $25 and the market were $30, the bondholder would lose $5 on his right to purchase each share were he to turn in his called bond for redemption without exercising his privilege. Here as in the case of the convertible bonds, the suitability of the common stock for the investment portfolio of the bondholder is unimportant. Relative market value is the important consideration. If the holder does not care to or cannot own common stock, he can realize his profit by selling the stock at once. Corporations with convertible bonds and bonds with warrants that have the opportunity to "force by calling" during a favorable stock market have to weigh the alternatives. Forcing means simplification of the capital structure, elimination of fixed charges and sometimes sinking fund, and reduction of risk. Retention of the bonded debt, however, often permits the corporation to show greater earnings per share for its common, and the saving from low interest charges as compared with the dividends it would pay on the additional shares may provide a sum with which the company could repay debt at what amounts to no extra cost to the stockholders.

Both the callable and convertible provisions contribute an element of indefiniteness to the ultimate duration of the indebtedness. The conversion privilege permits retirement prior to final maturity at the discretion of the bondholder, and the call feature also provides for this at the option of the business's management. In each case, however, a definite final maturity is almost always provided. There is a form of bond indebtedness which has no final maturity and thereby offers the ultimate in indefiniteness of duration. It is known as a "perpetual bond" but has little

or no place in the finance of private business enterprise. It is principally suited to the field of public finance, where the debtor, a sovereign power, may be assumed to have permanent existence.

In order to illustrate the point made at the beginning that the individual provisions discussed in this chapter and contained in the original outline are not independent of one another, it might be well at this point to illustrate how several have been combined in a single indenture. Take, for example, the Bearings Company of America's first mortgage 4½% serial convertible callable bonds dated May 15, 1947. These are coupon bonds in denominations of $1,000 and $500 secured by a closed mortgage lien upon substantially all the property of the company. They bear a fixed annual interest return payable semiannually but possess a participating feature in the form of a conversion privilege. Each $1,000 and $500 bond is convertible at the option of the holder prior to maturity or redemption into common stock having a par value of $1 per share at the rate of 100 shares and 50 shares, respectively. Principal is to be repaid serially at the rate of $25,000 annually from May 15, 1948, to May 15, 1961, and $150,000 on May 15, 1962. However, the company possesses the option to redeem the issue in whole or in part at any time prior to maturity on not less than 30 days' published notice by payment of principal, accrued interest, and premium due per schedule.

Also, the Brown Shoe Company 3¼%, callable sinking fund debenture bonds due July 1, 1971, provide an interesting example. This issue represents an unsecured general obligation of the company, in contrast to the first mortgage lien of the above example. The return is fixed at the annual rate of 3¼% and is not clouded at all by any participating feature. Finally, although the final maturity date is fixed as of July 1, 1971, the sinking fund and callable features add a distinctly indefinite character. For example, the company is required to set aside, as an annual sinking fund, cash sufficient to redeem on July 1 of each year, commencing in 1954, not less than $440,000 or more than $880,000 principal amount of debentures. Furthermore, the issue is redeemable by lot as a whole or in part at any time prior to maturity upon at least 30 days' notice.

Any number of other cases could of course be cited to illustrate still further refinements of combinations. However, the variety of provisions offered by these two examples should serve sufficiently to illustrate the point that bond differences will for the most part be based upon the three essential aspects of the obligation: the underlying security, the method of income participation, and the provisions for retirement.

Questions

1. On what major points do bonds vary in practice?
2. What general factors determine the essential form of a bond?
3. What is the bond indenture?
4. Which is the better investment medium, a first mortgage bond or a debenture bond?
5. Which has first priority in the event of liquidation, an income bond or a debenture bond?
6. Is a closed- or open-end mortgage to be preferred by the borrower? By the lender?
7. Of what value is the after-acquired clause?
8. If a corporation having a first mortgage bond issue with an after-acquired clause outstanding purchases a piece of property subject to a purchase money mortgage, which claim ranks first?
9. What types of securities are used for collateral in the case of collateral trust bonds? What is the sense in using one's own instruments?
10. What is the principal type of equipment obligation used by corporations? Is it really a bond type?
11. How can you explain the usual high investment value of these instruments? Can you establish any general principle from this case?
12. What is the logic behind a company's issuing convertible bonds? Under what circumstances would a holder be likely to exercise the conversion privilege?
13. How do bonds with warrants differ from convertible bonds?
14. What are the standard retirement provisions attached to bonds?
15. What are the relative advantages of sinking fund and serial bonds?

Chapter 21. RAISING OWNERS' FUNDS FOR THE BUSINESS

The owners' investment has already been referred to in the earlier chapters. The purpose of this chapter is to discuss the actual raising of funds from owners. Before doing so, the meaning of the term "owners' funds" and the basic financial principles of sound financing in this direction should be reviewed.

Review of Basic Ideas

In the sole proprietorship the owners' funds are those supplied by the proprietor; in the partnership, those supplied by the partners whether general or limited; in the corporation, those supplied by the stockholders whether ordinary common or preferred stockholders. The customary accounting practice for recording the amount of this ownership interest has been considered previously because of the necessity for using financial statements in the work of financial analysis, financial control, and the job of raising business funds. The need for such background may be illustrated both in the partnership and corporate fields. The item of *Partners' Loans,* for example, might be classified by the unwary businessman as debt rather than ownership interest. Yet the legal position of the partner with his unlimited liability to creditors means that any such loan account must be thought of as a part of the ownership interest protecting the prior claims of the creditors. Such a claim will, of course, enjoy a priority in any settlement among the partners themselves, and from that limited point of view it enjoys certain of the characteristics of debt: a right to a definite principal sum, probably a maturity or due date, and generally a stipulated fixed rate of interest.

Similarly, priorities may be established for some owners as against others in the corporate form of business. Preferred stock typically enjoys a priority for its share of any earnings distributed and a priority in liquidation for some named principal amount.[1] These creditorlike priorities do not make such stock a debt. Its ownership nature is evidenced by its subordination to all debt, its dependence upon action by the board of directors for the payment of any dividend, the lack of any maturity

[1] A peculiarity of preferred stock not found in debt is the occasional statement of the preferred stock claim in the balance sheet at a figure greatly different from its priority in liquidation. Thus, Remington Rand Inc. records its $4.50 cumulative preferred stock in its balance sheet at its $25 per share par value although the stock is entitled to $100 per share on redemption, dissolution, or liquidation.

date, and voting power except where provision to the contrary has been made. In an endeavor to attract funds by making preferred stock more like a credit instrument, special features may be added, such as protective provisions and a provision for retirement by establishing a sinking fund.

Perhaps for purposes of financial analysis, however, too much emphasis should not be placed on legal status lest certain economic and business realities be underemphasized. Actually debt, too, can be arranged in layers of priority, as seen in earlier chapters, so that as a practical matter some debt may bear risks not greatly different from that of ownership. Furthermore, businesses differ greatly in their risk character so that a preferred ownership claim might be legally weaker but practically stronger in one business than a debt claim in another. The legal strength of debt, however, cannot be duplicated even by the use of such preferred stock features as preference as to dividends, preference as to principal in liquidation, a cumulative dividend, and a sinking fund. Payments of any sort to the preferred stockholders, whether dividend or sinking fund, can never be forced when they might jeopardize the ability of the business to pay its debts.

In addition to the foregoing, the reader should review those points of financial analysis previously made which will enable him to recognize and appreciate the following points in the study of the ownership funds of the incorporated business: [2]

1. The customary terms in the balance sheet which include the items that constitute the ownership interest, such as Capital Stock, Surplus of various types, and Surplus Reserves in the case of the corporation.

2. The impossibility of distinguishing on the balance sheet that part of the ownership interest which represents paid-in ownership and that part built up from retained earnings. Two examples will indicate the problem. A corporation may issue stock as a stock dividend and transfer a portion of its Profit and Loss Surplus to the Capital Stock account so that the Surplus will no longer represent the total accumulation of retained earnings. On the other hand, a corporation may after losses over a period of years obtain authorization from its stockholders to reduce its Capital Stock by these losses and give its Profit and Loss Surplus a fresh start. Only by tracing the record of the ownership accounts over the life of business can one hope to distinguish the sources of the ownership funds.

3. The accounting conventions that prevent the book worth of the ownership interest from representing the current market value of that interest. The differences arise out of the following:

[2] See Chapter 3.

First, the rules for carrying asset values, upon which, in turn, the book value of the residual ownership interest depends. Thus, inventories may be carried at the lower of cost or market or at cost as determined by the last-in, first-out (LIFO) method, and any real estate and equipment are ordinarily carried at original cost less straight-line depreciation. Such accounting procedures clearly carry no intent of showing the current market worth of the assets. Consequently the assets so stated minus the debts of the business will not be likely to equal the current market worth of the owners' interest.

Second, even if the accounting process were designed to show all assets at their current market worth (an idea that seems implied in the definition of the balance sheet as "a statement of financial condition at a given date"), the excess of assets over debts would not necessarily reflect the value which either the owners or others would set upon the ownership interest. This latter value is largely determined by the expectations of profits to be derived from ownership of the equity of the going business. This concept of value will be considered more fully and more critically at a later point in this chapter.

With this discussion of preliminaries concluded, the consideration of the proper subject matter of this chapter may be initiated with a statement of the two fundamental rules of sound finance governing the matter of ownership funds, or, as it is sometimes called, "equity capital."

Fundamentals of Adequate Equity Capital

The primary rule for ownership funds in a business should be that they should be adequate to maintain solvency and to meet the conventional rules of creditors by which they determine the margin of safety which they deem necessary to ensure the satisfaction of their claims. The careful reader will note two separate points. Both are essential. They are paired in a single rule because they are both directed to the common end of solvency. Although the conventional rules or standards which creditors adopt are for the purpose of maintaining debtor solvency, they may at times be insufficiently strict. On such occasions the management, if they properly value survival, will practice financial restraint so that they may "live to fight another day" rather than "strive for the maximum profit."

The average small businessman is more likely to feel the reverse, at least at times, namely, that the conventional rules of creditors unduly restrict his operations and opportunities beyond the needs of solvency. In particular cases, he may be right since rules are made for the mine run of business situations and are not tailored to meet the individual case. The businessman who attempts to defy convention, however, runs two risks, (1) that of being denied further credit or being severely re-

stricted when his lapse is discovered; and (2) the possibility that, in the event of temporary inability to meet his obligations and financial trouble, he will be unable to obtain the cooperation of his creditors when his record shows what they regard as a financially unskillful and speculative management of his business. The penalty for failure in such cases is a severe one—the owners' investment may be wiped out completely in liquidation. That this hazard is considerable is evidenced by the business failure statistics in prosperous as well as in depression years.

A second rule for ownership funds in a business is that a surplusage of financial strength should be created in good times to preserve the business when conditions are adverse. For a few businesses this idea might take the form of building up cash resources; for most concerns, especially small- and medium-sized business units, a more likely approach is to build up the owners' investment in good times by retaining earnings so that creditors' claims may be reduced to the point that a surplusage of credit strength rather than of cash is developed. The creation of such a margin of safety will have three favorable financial results:

1. By reducing the dependence on creditors the business will be in less danger of being compelled to restrict operations in a period of adversity. At such times creditors bring pressure to bear upon their weaker debtors to reduce their indebtedness, which has the double disadvantage of not only testing technical solvency at a difficult time but also often forcing a contraction of operations, which makes profitable operation harder to achieve.

2. The danger of insolvency through a loss of working capital whether from ordinary operating deficits or from unusual inventory shrinkage or receivables write-offs is greatly reduced. If, for example, the following small business suffered losses of $2,000, which reduced its working capital by that amount, we can picture the result reducing current assets from $10,000 to $8,000 and the owners' capital from $5,000 to $3,000.

Cash	$ 1,000	Current debt	$ 5,000
Receivables	4,000	Owners' capital	5,000
Inventories	5,000		
Total	$10,000	Total	$10,000

The result would be to lower the current ratio from 2 ($10,000 ÷ 5,000) to 1.60 ($8,000 ÷ $5,000). In such a situation the threat of insolvency increases. If the creditors should insist upon a contraction of credit so as to bring the current ratio up to the level of 2 again (point 1 above), the current assets would have to be squeezed from $8,000 to $6,000 to yield the necessary cash to reduce the current liabilities from $5,000 to $3,000,

at which point they would equal the reduced working capital and so one-half of the current assets.

3. In case the debt reduced in good times was of the fixed rather than the current type, the strengthening would take the form of reduced interest and sinking fund claims during any ensuing period of bad times and poor earnings. In this connection, the disadvantage of the currently popular form of real-estate loan which requires *equal* annual payments over its life for the *combined* interest and principal may be noted. In good times and bad the drain on cash continues unabated by the principal reduction unless the debtor has been given the option and availed himself of the privilege of making prepayments. Unfortunately even this option has been made less valuable in some cases by requiring that prepayments shall all be applied to the last installments due so that the fixed burden is not immediately reduced and principal payments can be deferred only at the pleasure of the creditor.

Ownership Funds from Earnings

After noting the two principles which should be followed with respect to maintaining adequate ownership funds in the business, the question arises as to how the business is to acquire these funds. Such figures as are available (Table 1) indicate that retained earnings are much more important as a source of ownership funds than new money. Table 1 shows only new corporate stock issues, that is, issues put out for refinancing purposes are excluded since they add nothing to the funds available to business. Preferred as well as common stocks are included. Some might argue that the relative importance of retained earnings is understated because the figures are net after the subtraction of the deficits of the less successful corporations, as indicated by the minus figures in the years 1930 to 1938.

While such figures are dominated by those of large business units, it would seem on logical grounds that the same tendency would be even truer for smaller concerns. Because the small business has such limited appeal as a vehicle for ownership investment outside of the limited circle of persons who run it, primary reliance upon retained earnings for expansion is almost inevitable.

The motive for retention of earnings is often dismissed with the explanation of "the hope of profit." To understand the actual operation of this motivation, some analysis is useful. The expected additional profit must be sufficient to induce the sacrifice of leaving the earnings in the business. The rate of profit cannot always be inferred from past return on investment since the added funds may be more or less profitable. The profit may be either direct or indirect. Where direct the profits from the

TABLE 1

FUNDS RAISED BY NEW CORPORATE STOCK ISSUES AND BY UNDISTRIBUTED CORPORATE PROFITS, 1929 TO 1951

(In millions of dollars)

Year	Stock issues	Retained profits
1929	$5,924	$ 2,597
1930	1,503	− 3,045
1931	311	− 5,381
1932	20	− 5,998
1933	120	− 2,428
1934	34	− 1,619
1935	69	− 613
1936	352	− 284
1937	408	− 8
1938	67	− 906
1939	97	1,209
1940	135	2,398
1941	133	4,921
1942	118	5,136
1943	92	6,153
1944	224	6,128
1945	657	3,803
1946	1,472	8,073
1947	1,219	11,988
1948	908	13,484
1949	971	8,821
1950	1,200	12,270
1951	1,605	9,625

SOURCE: *Federal Reserve Bulletin*, June, 1952, p. 677; *Survey of Current Business*, National Income Supplement, 1951 ed., pp. 174–175; *Survey of Current Business*, July, 1952, p. 20.

added dollars may be more than proportionate, because by permitting a larger and more efficient scale of operations they may make all business more profitable. On the other hand, the business may have already skimmed off the most profitable field of operations and may suffer a diminished though still attractive rate of return on additional business. Sometimes the outsider cannot understand the retention of earnings in a business where the past rate of return has been subnormal. The answer may lie in a need for new equipment or additional lines of merchandise the lack of which to meet competition would otherwise cause more losses. "Profit" in such a case equals "loss prevented."

This last situation lies close in character to what might be called investment for reasons of "indirect profits." (1) Perhaps the best example of this indirect return is where the owners of a small concern expand, not merely for the sake of return on capital, but because of the expectation that their own managerial efforts, as reflected in their salaries, will grow with an expanded volume of business. (2) Another indirect form of return is the reduction of risk to the owners which follows from debt reduction brought about by increased owners' investment. Where the debt paid off means savings of cash discounts from trade creditors or of substantial charges by a finance company, direct profit is often amply rewarding but the saving from the elimination of a low rate of bank interest might seem small. The real "profit" in this latter type of case is typically in the reduced risk and not merely in the small interest savings. (3) A third type of indirect profit from retained earnings is found in the case of the incorporated business which prefers to avoid maximum dividends because its owners pay high personal income taxes and the policy is to defer dividends often in the hope that the owners will realize their profit by taking it in the form of a capital gain at some future time through the sale of their stock at a price that reflects the retained earnings.[3]

In conclusion, the difference between the large corporation and the small concern should be noted in the matter of motivation. The pressure of the stockholder-owners is more remote for the former. Its stockholders are frequently scattered and may exercise but a moderate influence on dividend policy. Or if the stockholders are few and wealthy, their heavy personal income taxes are apt to lessen their desire for a policy of maximum cash dividends.

In the small concern the owners are generally identical with management, and so there is no "outside" pressure, but the wants of these owner-managers for their personal spending are immediate and pressing. Especially when the business is young and small, there is the desire of the owners to maintain a certain standard of living which as yet the business may be quite unable to support either as salary or profit. Except in the unusual case where the business has a financial "angel" willing to pour equity funds into preliminary deficits, such a business is likely to suffer from what its owners may choose to call "inadequate capital." Even at a later stage a continuous conflict may exist between the needs of the business for ownership funds to grow and the needs of the owners' families. The problem will generally be resolved by the temperament and "pro-

[3] Such corporations must be prepared to show need for unusual retention to avoid the Federal penalty tax on "improper accumulations of surplus" (sec. 102). Funds used for debt reduction would meet the requirement. Only where cash or temporary investments appear excessive are the penalties likely to be assessed.

pensity to spend" of the owners rather than by any well-meant homily in these pages on the necessity for thrift and financial management to achieve business success.

The importance of this conflict between the business and personal needs of the owners to the financial development of the business needs to be underlined because of its importance to sound growth, which, as has been pointed out, is likely to depend upon retained earnings. In many service and merchandising concerns the salaries of management are much more important as a "cost" than the return to capital. Thus, a small retail grocery selling for cash might find 10 per cent of sales devoted to the owner's salary and only 2 per cent to the profit. If the ratio of sales to owner's equity was 5, the return on capital invested would amount to a 10 per cent rate. If through frugality this owner would cut his own pay from 10 to 8 per cent of sales (that is, by one-fifth), his apparent net profit would be doubled, rising from 2 to 4 per cent of sales and from 10 to 20 per cent on net worth. If this business were one where profitable expansion were possible, it is clear that a 20 per cent expansion of net worth and of business volume should make it possible to restore his "salary" to the old dollar level very quickly, even though it was kept at the reduced ratio of 8 per cent of sales.

Success in building up a business not only is a matter of skillful operation but must be accompanied by sufficient frugality to permit the business to fatten its net worth through profit retention whether that profit takes the apparent form of "owner's salary" or "net profit." (Note that in the unincorporated business the Federal income tax does not discriminate between the two forms of compensation.) In fact, it is highly probable that most small businesses which have grown to large ones have paid "salaries" or "drawings" to their owners which represented less than their real contribution, so that the reported profits or "return on capital" were actually "labor return" taken by the owners as "capital return."

On the other hand, many small businesses have probably been handicapped by the owners drawing sums which were more than the business could afford to pay considering the volume of business and its profitability. Even though such owners might be able to command equal or higher sums as salaries elsewhere, their own business may not be able to pay such sums either because they cannot afford to pay so much for a given function or service as a per cent of sales or because their business is unable to utilize the abilities of the owners to such advantage as some other concern.

In this respect, the economics of our free enterprise system should be noted. Persons are freely allowed to start businesses without any permit from any state planning board provided a sufficient amount of owners'

funds can be raised. Incompetent persons may consequently enter business although they will be restrained by difficulties in obtaining credit, just as the more able will tend to be helped by credit. This freedom of entry provides a variety of goods and services not likely to be obtainable under a strictly planned state capitalism. The small store, for example, often provides a service for a very low money compensation because the owner values his independence so that he is willing to take less than he would as an employee. In manufacturing, freedom of entry results in experimentation in new products and new methods of production that either a state or a private monopoly would be much less likely to undertake. Such new ideas are often regarded as thoroughly impractical at the outset by outsiders.

The first and heaviest losses for failures are borne by those who supply owners' funds. These losses plus those of creditors are often regarded as the cost of free enterprise, which state capitalism would avoid. Actually, the losses of a state monopoly of trade and production cannot be readily compared because they do not appear in the accounts but are found in poor service, inferior goods, and higher prices that are possible because of an absence of competition. Even publicly owned enterprises in this country are not a good test of the probable results of complete state ownership of industry because they are generally subject to comparison if not to competition with privately owned and operated enterprises and so are under some pressure to do a better job than they would if complete state ownership existed.

Illustration of Unusual Growth from Earnings

Lest the reader get the impression that growth from earnings under present heavy taxes is entirely impossible, the exceptional case of a favorably situated concern is illustrated in Table 2. It should be remembered that under competitive conditions the average large concern would not be expected to make such a high rate of return.

Since this corporation used neither bonds nor preferred stock and had only moderate current debt, the favorable results cannot be attributed to trading on equity. The high ratio of sales to investment made possible a very favorable rate of return on investment even though the per cent of profit on sales was not extreme. In this respect, the illustration has special applicability for many small businesses in the service and merchandising fields where operating asset turnover is high so that a good profit margin whether the result of efficiency or the modesty of the owners with regard to their "salary" can result in a high per cent return on owners' funds and so a high rate of growth from earnings.

TABLE 2

McGRAW ELECTRIC COMPANY

Growth from Retained Earnings, 1932 to 1951

(Dollar figures in thousands)

Year	Net sales	Stock-holders' net worth	Growth		Net profit [a]
			Dollars	Per cent	
1932	$ 1,682	$ 1,367			
1933	1,910	1,463	$ 96	7.0	$ 106
1934	3,190	1,809	346	23.7	503
1935	3,802	2,255	446	24.7	614
1936	5,403	2,433	178	7.9	1,005
1937	5,884	2,900	467	19.2	945
1938	5,798	3,319	419	14.4	892
1939	6,920	3,905	586	17.6	1,413
1940	8,262	4,297	392	10.0	1,455
1941	10,318	4,731	434	10.1	1,379
1942	8,438	4,781	50	1.1	944
1943	9,503	5,019	238	5.0	869
1944	10,923	5,068	49	1.0	836
1945	9,029	5,286	218	4.3	810
1946	13,317	6,296	1,010	19.1	2,191
1947	18,639	7,586	1,290	20.5	2,594
1948 [b]	21,025	8,644	1,058	13.9	2,712
1949 [c]	69,344	26,059	[d]	....	6,096
1950 [c]	80,337	30,882	4,823	18.6	7,795
1951 [c]	86,703	34,780	3,898	12.6	6,246

[a] Exclusive of surplus credits.
[b] 1948 figures adjusted to eliminate effect of subsidiary purchased during the year.
[c] Not comparable with prior years. Consolidated figures for 1949–1951, not for prior years.
[d] Not computed because of change to consolidated figures and merger with two companies.
SOURCE: *Moody's Industrials*, 1940, 1952.

Special Need for Retained Earnings during Inflation

A special situation calling for earnings retention is found during a period of rising commodity prices characteristic of inflation. During a period when prices are rising 10 per cent, a concern will find it necessary to carry a 10 per cent larger inventory in terms of dollars in order to have the same number of physical units on hand. If selling prices rise proportionately, characteristically investment in customers' receivables will

rise by a similar per cent. With costs and expenses rising, cash balances if maintained in a reasonable relationship to current cash disbursements will also need similar expansion.

If the owners' investment is to keep pace in such a situation, it will need to be increased by the same percentage. Otherwise the asset expansion will have to be financed by the use of an increased proportion of credit, and asset-to-debt ratios will decline. During an inflationary period profits come somewhat more easily, but it should be clear that until the owners have made and retained a nominal or accounting profit of 10 per cent, they have not even broken even in terms of purchasing power or "real" capital. The record of many corporations during an inflation period shows a failure to maintain their owners' funds when allowance is made for the inflationary effect of rising prices on accounting profits.[4]

Flushed with apparently generous profits being shown in their earnings statement, owners are prone to increase distributions of earnings. A desirable minimum of earnings retention would at least maintain the owners' fund in terms of purchasing power. To fail to do so means debt expansion at a rate that will lower the ratios measuring balance-sheet strength and often contributes to the expansion of bank credit that furthers the inflationary trend. Should a deflationary reversal ensue, the concern that has minimized debt can better bear the troubles of such a period. In fact, if trading on equity is extreme, a fall in the price level will ordinarily reduce the dollar value of owners' equity by a much larger percentage than the decline in assets. Thus, if a concern with $100,000 of assets, all current, is financed one-half by debt and one-half by owners' funds, a decline of 10 per cent in the assets would mean a 20 per cent loss in the owners' funds.

New Investment from Owners

For the new business or for the old business which grows more rapidly than retained earnings (internal funds) can finance, external funds must be raised from the owners. For the sake of convenience, these owners may be classified as (1) management-owners, (2) investor-owners, and (3) speculator-owners and their availability as sources of funds discussed. Such a classification may cut across the lines of classification mentioned earlier which were derived from form of organization (proprietor, partners, stockholders) or from priority (limited vs. general partners, preferred vs. common stockholders).

[4] Thus *Barron's* (Mar. 15, 1948, p. 33), reporting a study of a sample of large industrial corporations for 1947, found that the retained earnings for only 1 out of 14 companies were sufficient to equal 18 per cent of the current assets, that is, an amount equal to the rise in the price level.

A general rule is that most new businesses must at the time of their founding derive their ownership funds from the individual or limited group of owners who expect to run the business. These persons might be so defined as to include any relatives or friends who might advance funds not on the basis of any businesslike appraisal of the prospects of the enterprise but rather because of their personal relationship. To the extent that the manager-owners choose to treat these parties on a businesslike basis, suitable formal contractual relationships can best be discussed in the immediately ensuing sections devoted to investor- and speculator-owners.

The logical relation for these manager-owners to the business is that of residual claimants, that is, proprietor, general partner, or common stockholder. Their ability will be the chief factor in determining success or failure. They are in control and expect to reap any major profits. They should expect to bear the major risk both as a matter of equity and as evidence of good faith.

The implication of the foregoing is that management should bring both experience and personal capital into the new business. In the matter of previous experience, one of the interesting aspects of administering the government-guaranteed GI loans for returning veterans from the Second World War was the work of bank and mercantile credit men in advising applicants without that important qualification against starting a business until they had acquired that essential basis for success. Similarly, personal capital has evidential value as an indicator of potential success. Ability to manage one's personal finances so as to save and produce a personal stake indicates a type of self-control that is likely to be of first-rate importance in the later management of the business so as to keep it solvent. The individual whose personal finances go from crisis to crisis is likely to have a similar experience in business.

Sometimes an important contribution of one of the manager-owners is to supply financial sense and persuasion to the management group. Sometimes a finance company, supplying credit that comes close to being ownership funds, has enforced a businesslike administration of finances that has proved an indispensable element of success for an organization that was made up of manager-owners possessing sales talent but very limited capital and scant ability to handle their financial problems.

Unequal Contributions by Manager-Owners

The chief problem likely to arise where the ownership funds are supplied wholly by manager-owners will occur when there are two or more owners and their contributions of capital and labor are unequal. Sometimes an inequality in capital contribution may balance an inequality in

managerial or operating ability so that an equality of partnership in the profits might be established nevertheless. In such a situation there is an interesting difference between the corporation and the partnership. If two partners contribute $10,000 and $2,000, they may share equally in control and in net income or losses and in the event of liquidation they could retrieve their capital in whatever different amounts showed as remaining to their credit.

In a corporate organization, however, an equal division of the stock in order to effect equality in income and control would have the result of giving the owner with the smaller capital investment an equal share in any liquidation. In spite of this apparent inequity, sometimes this kind of arrangement is adopted in a situation where the capital involved is small in relation to the profits and salaries that are expected and where in the contingency of liquidation the proceeds might well be so small as to make their division an unimportant matter. If such a limited number of owners wished to modify the equal division per share rule of corporate liquidation, they might arrange a special contract for liquidation.[5]

Where unequal capital contributions are regarded as a temporary arrangement, the excess contribution of any manager-owners might be given a priority and provision made for its repayment from retained earnings before any distribution save for salary is made to the owners on their investment. The excess contribution could be set up as a partner's loan or preferred stock, depending on the form of organization.

Funds from Investor-Owners

When owners' funds are contributed by persons who plan to take no active part in the management or operation of the business, their hope is only for a return upon their capital investment. If the expected return is only for such ordinary income as interest or dividends, with perhaps the ultimate return of their original principal, they are seeking what may be called an "investor position." If, however, their hope is primarily for appreciation of their commitment, such as might be sought when one buys the common stock of a mining venture, or an oil-drilling operation, or a company manufacturing and distributing a new product, they have a speculative objective. In some cases a mixture of motives may be found.

[5] An unusual case in a large corporation illustrating such a contract is described in the prospectus (May 20, 1948) of the Playboy Motor Car Corporation, which had sold 5 million shares of its common stock to the three founders for 1 cent per share and was offering 20 million shares to the public at $1 per share. An agreement provided that if the corporation should be liquidated during a period of three years, the original stockholders would waive any claim on assets until the stock sold the public should have received $1. The agreement was to expire if in any fiscal year the corporation should earn not less than 6 cents per share.

While a creditor position would be a logical form of contract to offer the investor-owner, it would deprive the business of the financial advantages of ownership funds. On the other hand, while straight common stock might be used, very often a preferred ownership claim, such as a limited partnership or a preferred stock, is created. The features which would serve to define a relationship dominated by the investor point of view might well run along the following lines:

1. *Income.* To ensure income regularity, a definite stipulated rate of return is ordinarily provided. Because of the risk, the rate would presumably be higher than any creditor of the business would receive. This return would be given priority over any return to be paid to the ordinary owners of the business.

2. *Priority in liquidation.* While liquidation is likely to occur only when a business has come to an unhappy ending, often so fatal that it wipes out all values for all owners, importance, probably disproportionate importance, is generally attached to a provision that the preferred owners shall be paid back their full original investment before any participation shall be accorded ordinary owners.

3. *Repayment of investment.* In the limited partnership, a provision for repayment prior to the expiration of the partnership agreement is exceptional. However, some arrangement such as a sinking fund might be set up. Such a plan is much more usual when the preferred owner has acquired preferred stock in a corporation. Such a repayment plan provides a partial equivalent for the maturity of a loan, and where a ready market for the resale of the preferred stock is lacking, it also provides an artificial market for the occasional recovery of principal. Gradual retirement of a preferred stock improves the safety of the remainder of the issue, strengthens the position of the common stock as well, and where achieved out of earnings is fairly painless.

4. *Protective provisions.* Since the investor-owner rarely has control (in the limited partnership he is legally forbidden a voice in management), a substitute factor is frequently found in the form of protective provisions. These are ordinarily designed to ensure sound financial policies that will prevent weakness or insolvency.[6] Such provisions might stipulate (*a*) the maintenance of some minimum current ratio, such as 2; (*b*) the restriction of distribution to ordinary owners to profits earned after the date of the preferred owners' investment; (*c*) the restriction of distribution of their investment to general partners or, in the corporation,

[6] See H. G. Guthmann and H. E. Dougall, *Corporate Financial Policy*, 2d ed., for provisions of this type as they are found in the preferred stocks of large corporations (pp. 88–90) and in term loans by banks (p. 411), (New York, Prentice-Hall, Inc., 1948).

repurchase of ordinary shares; (*d*) limitation upon salaries or drawings of officers or partners where current earnings are insufficient to cover such amounts; and (*e*) the carrying of insurance on the life of important partners or officers, made payable to the business, to be used for the repayment of the preferred owners in the event of the death of such key personnel.

Where can purchasers of such an investor-type arrangement be found? The high risk and the low investor appeal of the typical small, newly founded business, which by its very competitive nature is likely to earn only a limited return, does not make a fitting applicant for investor-type funds. This condition explains the previous reference to the customary dependence upon relatives and friends. Their willingness to help may stem from one or more of three chief considerations, (1) a lack of business experience, which results in an underappraisal of the risk involved; (2) a reliance upon the personal qualities and sometimes the personal credit of business founders (these might undertake to make good personally on any losses if the business should fail); and (3) that spirit of mutual support which often activates the family group and friends to go beyond the dictates of purely business considerations. Occasionally other persons motivated by considerations of other than direct investment return may be willing to supply funds. Thus, businessmen might supply funds to bring a new business to their community or a manufacturer might help finance a venture that would supply a desired material or part not readily obtainable otherwise.

Only the exceptional new business where the possibilities of gain are large enough to counterbalance the hazard of complete loss is likely to attract ownership funds on a business basis. But the appeal in such a new venture would be predominantly speculative rather than investment in nature. Even then the business is likely to attract ownership funds only if it is large enough, so that the ownership interest can become suitable for fairly wide distribution to provide marketability, and so as to develop a reasonably permanent organization.

After the business has been established and operated for a period, it has certain advantages. Ability to survive the period of infant mortality, the most hazardous period of business life, has been demonstrated. Evidence of profitability may have been established in the accounting record. Management has won its spurs. However, even at this stage the small business unit lacks investor appeal for ownership type funds. The major reasons are (1) the dependence upon the continued health and ability of one or two persons, (2) the possibility of very rapid deterioration of financial position and dissipation of capital because of the relatively small amount of capital funds in relation to the stream of

cash expenditures, (3) the priority and the high ratio of the owner-manager's compensation to the net profit for the return on ownership funds, and (4) the extreme difficulty of getting one's investment back save by waiting for retirement from profits. These factors explain the dependence of the small business upon equitylike funds from creditors, such as trade creditors, who have a special motive for extending liberal credits, and finance companies, which charge enough to permit close supervision and protection of their advances.

Funds from Speculator-Owners

The preceding discussion has emphasized the hazards of ownership investment and so the important element of risk which is often ignored or at least underestimated. Under the circumstances the appeal to the speculative-minded would seem more logical than to the investment-minded. But, as suggested earlier, the return for the typical small competitive business is likely to be low. Only the occasional new venture holds out a prospect of high return. During the early 1930's upon the repeal of prohibition, a number of brewing and distilling concerns were promoted with this type of appeal, their common stock being offered to the general public. After the Second World War three substantial offerings of common stock were made by new automobile manufacturing ventures, the Kaiser-Frazer Company, the Tucker Corporation, and the Playboy Motor Car Corporation.

The two hopes found in such a speculative commitment are that a high rate of profit will be earned on the owners' investment and that further growth in value may be achieved by the reinvestment of at least a portion of the earnings, also at a high rate of return. In such ventures the necessary appeal to a wide body of purchasers makes the limited liability, permanent organization, and readily transferable shares of the corporation the natural medium of offering. Such an investment permits the cashing in on any appreciation when and if it develops and permits a partial salvage of principal by resale if events fall short of hopes.

Advantage of Capital Gains

In order to appreciate the comparative value of capital gains as compared with ordinary income, their special treatment for the Federal income tax should be understood. Long-term capital gains (that is, gains on the sale of property such as stocks or real estate owned for more than six months) are subject to personal income taxes at only one-half the rate of ordinary income, such as salaries, dividends, and partnership profits, or at 26 per cent, whichever is lower. Because of the latter option, whenever a person's income, including one-half of his long-term capital

gains, mounts to the point where he pays over 52 per cent on the last income earned, he will find it advantageous to elect the 26 per cent ceiling rate for that part of his capital gain income which carried him past that rate of taxation.

This apparently generous tax treatment of capital gains arises out of some problems of administering an equitable income tax. A capital gain may represent a slow accumulation of value, much like compound interest, over a period of years. If taxed in the year it is realized as one lump sum, the tax rate can run so high as to take most of the gain, or many times the tax had the gain been spread over a number of years in relatively small amounts. Furthermore, off-setting capital losses may occur in years when they cannot be used to offset the capital gains so that the government might be in the position of taking most of the gains but leaving the burden of loss for the individual to bear. In years of gain the Treasury would sweep in the profits; in years of loss it would let the taxpayer bear the grief.

Some idea should be had of the possible burden on the speculator were capital gains taxed like ordinary income and he had the misfortune to have his capital losses occur in years when he could not utilize them to save taxes. To offset a dollar of loss he would be obliged to gain enough *after taxes* to equal that loss before he would *break even.* Thus, if his tax were 50 per cent, he would need to gain $2 (less 50 per cent tax) for every dollar (no tax saving) of loss in order to break even. If the tax rate were 75 per cent, gains would have to be in the ratio of $4 (less 75 per cent tax) for every $1 of loss; if tax rates were 90 per cent, the ratio of gains to losses would have to be 10 to permit breaking even. Since, however, the long-term capital gains tax ceiling is currently at 26 per cent, roughly only $1⅓ of capital gain is needed to provide enough to counterbalance a dollar of capital loss, even though the taxpayer has been unable to collect any tax reduction from his capital loss because of its occurrence in a year in which it could not be utilized to offset capital gains.

Realization of Capital Gains

If speculative profits from capital gains are to be one of the inducements for attracting ownership funds into business under a system of free enterprise, some means must exist for cashing in on such appreciation. Herein lies a large part of the economic significance of the stock market. That market, by providing, in effect, a paying teller's window, makes the act of deposit in the bank of industry ownership much more attractive. Furthermore, permitting the cashing in of capital gains when the business has developed into a profitable going unit and a more investmentlike character, the stock market makes it possible for the specu-

lative owner to shift his funds into other new and untried ventures. Thus, funds are allowed to move about into the forms of investment that best fit the inclination and temperament of the owner. Were persons with capital frozen to their holdings like the landowners of a feudal system, the only source of funds would be the current income of persons able and willing to invest. Present-day shiftability of ownership widens the source of supply for the business seeking ownership funds.

Because of the restricted market for ownership investment in the small- and medium-sized business, whether incorporated or not, more thought must be given to the conversion of such ownership into cash than in the case of the large corporation. One advantage of a partnership or corporation in which there are a number of owners over a sole proprietorship is found in the number of owners who constitute potential purchasers for one another when one of their group wishes or needs to dispose of his interest. Either a sale may be arranged with one of the other owners, or the business may be in a position to repurchase the investment.

Arranging for Control

Not all the legal devices that are used to arrange for the control of the business unit can be considered here. Some of the more important ones that are related to the financing and affect the form of the financial instruments are appropriately a part of this discussion. Where some persons contribute primarily managerial skills and others primarily capital, a conflict over the exercise of control may develop. In general, those active in management are desirous of a maximum of power to control; those supplying funds wish to protect their investment. Both are interested in obtaining a maximum share of profits. Managers are apt to ascribe all profits to their skill, losses to the unhappy force of external events; suppliers of equity funds are likely to rate high the need for compensation for the risks they bear and only too often actually suffer.

Four not uncommon arrangements may be outlined that are used to reflect managerial compensation in the division of profits under the corporate form of organization. In the partnership, such divisions are effected by simple agreement. In the corporation profit-sharing agreements are possible, but otherwise any division of profits must follow the contractual setup of shares of stock. Some plans for allocating possible profits to manager-owners in a greater ratio than their investment alone would warrant are as follows:

1. *Different prices for the common shares sold to investors and to the founders or management group.* A lower price to the founders or management group might be justified as compensation for (*a*) work in promotion,

obtaining personnel and capital, conducting experimental work; (*b*) providing labor and capital during the preliminary stages, when risks are greatest; (*c*) contributing intangible elements, such as patents, franchises, or good will, or (*d*) future managerial services. The last factor would be reasonable when management was being obtained for less salary than such parties could command elsewhere, possibly with much less risk and effort. However, in such a case they should be expected to make the capital actually invested so profitable that the investor-owners will still reap an adequate return in spite of the reduced investment per share resulting from the low price to management.

2. *Gift of option on common stock from the financing group to the managers.* Here also the object is to provide additional compensation, presumably in the expectation that the management will add more to the value of the holdings of the investor group than what is given up in the way of values. It is also sound policy from the point of view of the investor group to have management have a definite economic interest in creating stock values. An option to purchase stock good for a period of years will depend for its future worth upon the profitability of the business, in which managerial skills are an important element. Since from the point of view of the Federal income tax law such "gifts" and options to purchase are merely a special form of compensation, a careful examination of the tax angles should be made before concluding such an arrangement.

3. *Creation of a special class of common stock for the management group.* Infrequently the common stock is divided into two classes, with the idea of giving one class to the manager group with a large part of the voting control and a share in earnings that is disproportionate to their capital contribution. Disproportionate control has been severely criticized by some in the case of large corporations. However, when the stress laid upon the managerial factor in success is appreciated, such a grant of power to chosen persons enjoying investor confidence can be understood. The chief weaknesses in such a relation may lie in its irrevocable nature, which might be dangerous to the investor group in case of the death, incapacity, or downright failure of the controlling group to deliver the expected quality of management. Sometimes the grant of power is transferable, which might constitute a further investor hazard.

An example of such an arrangement is found in the case of a small manufacturer of equipment in the printing field who developed, patented, and produced a device so that he had built up a net worth of $100,000. Certain new devices required additional funds for expansion somewhat more than ten times his own capital. A financial group put up the re-

quired funds and accepted common stock. A special Class A common stock was created to be issued solely to the manager-owner for his capital interest. This stock gave him the right to elect a bare majority of the board of directors and 10 per cent of any profits distributed as dividends, even though the ordinary stock was more than 90 per cent of the ownership funds and might be expanded considerably at a later time. In effect, management was given a perpetual 10 per cent interest in profits. A weakness of the arrangement lay in the failure to provide for the contingency of death of the owner-manager. A sensible provision would have stipulated the automatic conversion of his special stock into one-ninth of the total ordinary common stock outstanding in the event of his death, resignation, or retirement. Such a feature would have been advantageous for the manager-owner as well as for the investor group since it would have simplified the question of the value and salability of his stock interest for Federal estate tax purposes in the event of his death.

4. *Preferred stock for the cash of the investor group with a "bonus" of common for risk compensation.* This arrangement has probably been used more often than any other, particularly by small- or medium-sized businesses. The investor group is given a priority for their principal which recognizes their position as outsiders with a minimum of control. The inadequacy of any ordinary fixed preferred dividend rate is recognized by the "bonus" of common stock, that is, a share in the profits over and above this ordinary return. The subordination of the stock claim of the management group serves as evidence of their good faith in the future of the enterprise. However, where that group has little or no cash investment, some limitation on their salaries would appear desirable as supplementary evidence.

Sometimes, instead of giving the common "free," a nominal price tag is put on the junior stock. Practically, this stock may be an important part of the compensation for risk, and the buyer should examine carefully into the share of profits going to his group (it is sometimes quite inadequate) and weigh its potential worth.

A sinking fund might be used for this type of preferred, but the possible undesirability of using earnings for this purpose at a time when the business might require further ownership funds for growth should be considered. In some ventures a specific sinking fund has not been set up, but a provision has been made that no dividends should be paid on the common stock so long as any of the preferred stock was outstanding.

Such a plan might be particularly worth adopting in a risk-fraught venture when personal income tax considerations are important. Were all profits used for dividends, the recipients would find them wholly taxable as personal income, and the business would have to pay out a

number of times the original investment as dividends before the investors would have received a net amount after taxes equal to their original principal. If, however, corporate profits are used for the redemption of preferred stock, the result is a tax-free return of principal, only the dividends being taxable. In the meantime, the earnings retained for preferred stock retirement build up surplus and the common stock equity, creating a reasonable expectation of long-term capital gains for the latter.

Two alternatives which are likely to be less satisfactory for achieving the ends outlined above in the case of the typical small- or medium-sized concern are participating and convertible preferred stock. As in the fourth alternative described above, the use of preferred has a certain logic for resolving the conflict between the investor and management groups. A participating preferred is a device for offering a hope of a superreturn upon the preferred itself instead of a separate common stock as the compensation for risk. In the participating issue, the preferred is permitted to receive a fixed cumulative rate such as 5 or 6 per cent like the ordinary preferred and then an additional dividend when and if the common is paid stipulated amounts.

Should high earnings make the participating feature really valuable, the common stockholders can often avoid payments by retaining earnings and using them to redeem the preferred. This eventuality might be made less of a hazard to the preferred stockholder by making the preferred noncallable or callable only at a high price. The relatively infrequent use of the participating preferred even among large corporations suggests that experience has indicated the desirability of putting the priority and investment character in one security—a straight preferred—and the speculative hope of large return in another separate issue—the ordinary common. This separation was the idea used in alternative plan 4 above. The interested reader might analyze the possible and likely similarities and differences between the participating preferred stock of a corporation and the limited partnership in such matters as income, priority in liquidation, repayment of investment, and voice in control.

The convertible preferred is like an ordinary preferred but gives the holder the option to exchange it into common stock whenever he finds it advantageous to do so. The usual factor that induces exchange is the payment of larger dividends on the common, which can be had by surrender of the preferred, than upon the preferred. The type of buyer who would find attraction in the position of priority in the first place might not care to exchange his position for one of greater uncertainty and risk. In the case of the large company whose common stock is widely held and readily bought and sold on the stock market, such an exchange

is unnecessary to reap the speculative gain. The preferred holder can keeps his preference till the high profits of the common make exchange profitable and then take his profit by conversion of his stock and sale of the resulting common shares on the market. Consequently the convertible preferred is used fairly often by the large corporation, especially if it wishes to work toward an all-common-stock ownership structure and eliminate prior issues.

Sometimes when the market is unfavorable for the sale of common stock, a convertible preferred can be sold to an investor group which appreciates the mildly speculative profit possibility in the conversion feature. The preferred will then be converted by the voluntary action of the holder when and if the market for common stock develops to the point of making such action advantageous. Because of the lack of a ready market for the common stock, the smaller corporation has found the convertible feature a less alluring device for attracting funds and probably has used it much less often than the large corporation.

Should the Government Aid the Supply of Equity Funds?

The preceding discussion has indicated the difficulties in obtaining ownership funds for the small- and medium-sized business. A partial answer to the need has been seen in the equitylike credits sometimes found in trade credit and finance company operation. Some have gone so far as to argue that the problem be met by either government loans or government-guaranteed credits, the latter after the manner of the GI business loan or the home mortgage credits insured by the FHA. (The insuring agency is known as the Federal Mutual Mortgage Insurance Fund.)

Sometimes the argument for such governmental aid is based upon the occasional complaints of businesses that have felt deprived of credit which they felt they should be able to obtain. Such studies as have been made have shown no widespread and clear-cut lack of adequate *credit* facilities. Owners unable or unwilling to obtain *ownership* funds sometimes seek unwarranted *credit* extensions. The very small volume of credits to ordinary business extended by the RFC and the Federal Reserve banks under special legislation to meet the supposedly inadequate credit grants of private financial institutions fails to support the complaints of serious failure of the latter to perform their function.

Others have used as an argument the favorable experience on loans guaranteed by the government which were made to manufacturers of war munitions and supplies during the Second World War. Those who advance such evidence for Uncle Sam as a banker generally ignore the high rate of failure in peacetime among small and new business and the losses

of private creditors actuated by profit motives. The war experience lacks validity for peacetime conditions because the businesses receiving these special government-guaranteed credits were faced with an almost unlimited market for their production and the government was willing to purchase despite high costs in deference to the primary needs of winning the war. In normal times two critical problems of the weak business are to find markets and to meet the prices set by low-cost efficient producers.

Small businessmen have been generally wary of schemes for government aid to their capital supply. They have recognized the danger of increasing already vigorous competition by an artificially stimulated supply of credit. The additional competition, even though temporary because of its incompetence or uneconomic character, might be sufficient to increase business mortality or at least injure those other existing concerns which were the hardest pressed by the competitive struggle.

This consideration raises the broader economic question as to whether a real community need exists for the concerns that wish such governmental aid. The keen competition and small profits in the field of small business place a heavy burden of proof upon those who would argue a community need for a capital supply that would increase the number of business units at least temporarily. Fear of political factors influencing the making of such loans will also cause some hesitation by business in the sponsorship of any scheme for governmental aid to business credits.

Probably the best evidence as to the lack of any important need for governmental aid to the supply of ownership funds or their credit equivalent is the tremendous ability which a multitude of large and small business units have shown in every field—service, trade, manufacturing, mining, and public utilities—to acquire the needed private funds for an immensely productive economic society. If at times the result has been a too exuberant growth or there have been other examples of an inept handling of finances, that is the price for the freedom to enter business wherever an individual or a group are willing to put up the necessary ownership funds or induce others to do so. The greatest freedom prevails in the small business field. As the unit size increases and a wider group of owners is required, the requirement of greater training, experience, and reputation is likely to be demanded for the position of managerial responsibility. At this level of Big Business, the widest separation of ownership and management is likely to occur. There the acquisition of further ownership funds is restricted to retained earnings unless funds can be sought on the basis of a record that reflects competent handling of operations and finances and appears to demonstrate economic need by reasonably profitable results.

Questions

1. What principles underlie the use of equity funds?
2. What are the different types of equity financing?
3. What are the essential differences between preferred stock and bonds?
4. What is the logic to the issuance of preferred stock in place of debt? In place of common stock?
5. What is participating preferred stock?
6. Is the equivalent to preferred stock provided in any other form of business organization besides a corporation?
7. What are the principal motivating considerations to the use of retained earnings?
8. Why has this method of equity financing increased in the past decade?
9. What is meant by the term equitylike credits?
10. What is the special problem of small business in the accumulation of business capital?
11. Is the answer to the problem of small business financing only to be found in some sort of government assistance? Elaborate.
12. On the basis of all the discussion of the previous chapters on the subject of financing asset requirements, construct a topic outline which best summarizes what you consider to be the essential considerations which should be taken into account in any financing program.

PART VI

NONRECURRING FINANCIAL PROBLEMS OF THE BUSINESS UNIT

Chapter 22. FINANCIAL CONSIDERATIONS IN THE EXCHANGE OR SALE OF BUSINESS PROPERTIES

The problem of disposing of or acquiring business properties is one that quite often arises. Any number of conditions may account for such a situation. The following chapter will mention the possibility of sale as one means of combating an inevitably weak financial position arising out of a basic deficiency in investment funds. This is only one example of a need for making a sale. Another would be the illness, death, or retirement of a partner in a general partnership or a major stockholder in a closed corporation. The surviving owners in most cases would want to buy out the interest of the member or his estate. Also, in the case of illness, death, or retirement of a single proprietor or principal owner-stockholder, the heirs might be uninterested in or incapable of continuing the management of the operations themselves. Should an independent operator's competitive position be threatened by the aggressive activities of a larger or more capable concern, sale to this competitor before operations have been sacrificed too far may be the most reasonable solution. In like manner, one business might want to purchase another to improve its competitive position. The transfer of ownership interests in a business is also involved in any plan of merger or consolidation for the purpose of realizing operating economies or expanding control over a given market. Finally, some businesses that do not intend to sell their whole interest nevertheless are faced from time to time with the problem of selling some of their properties because of a contraction of over-all operations or a shift in physical location or a partial change in the line of activity.

Regardless of the particular condition responsible for a transfer of ownership there are certain basic problems which are common to every case. First and foremost is the problem of determining the prevailing economic value of the property. In arriving at such a value there will be a conflict of interests among the parties involved and the possibility of substantial wrangling, but certain definite principles exist which can provide basic guidance. The question of whether the sale shall be of the assets of the business or the outstanding stock poses a second problem. The question raises certain tax considerations which are of concern to both buyer and seller. Then there is the problem of how best to pay for the property once a value and form of sale have been agreed upon. This is not only a

concern of the buyer on account of limited availability of funds; the seller is also affected. By cooperating with the buyer in the form of payment the seller might well get a higher price than he otherwise would. Also, the whole problem of income and capital gains taxes enters in here. Should too much of the purchase price be covered by property other than cash, the seller might encounter some difficulty in paying the tax on any capital gains that might be realized. Or if this tax difficulty is avoided by a qualified exchange of stock as payment, the income tax problem may become more burdensome to the buyer, to say nothing of a possible threat to his control.

In view of these peculiarly financial problems associated with the sale or exchange of business properties an introductory treatise on business finance would be lacking if it did not cover the subject. To a great extent it is an area which involves nothing particularly new but rather calls for the synthesis and application of fundamental knowledge already covered. For example, determining an appropriate value for business property necessitates heavy reliance upon the principles and techniques of financial analysis. Coping satisfactorily with the problem of determining an appropriate means of payment, what is more, requires calling upon all the principles and methods of both short- and long-term financing. Nevertheless, the whole subject is sufficiently distinct in itself to require special attention to the application of these established points. If nothing more, special use of the principles of financial analysis in the development of fundamental principles of valuation is of such paramount importance as to make the material of this chapter essential subject matter.

Valuation of Business Properties

Types of Value—A Review

In Chapter 3, dealing with the fundamentals of balance-sheet information, it was pointed out that there are essentially four different types of value having special significance for business purposes. They are book value, replacement (or appraisal) value, liquidation value, and going-concern value. The term "market value," which is so often found in use, is not included here because it is merely the explicit representation of what we are trying to determine. That is, our concern is with the proper bases of economic value, not its manifestation. "Book value" for the most part represents original cost, with allowance for presumed depreciation in the case of fixed plant and equipment and depletion in the case of wasting assets. Inventory, furthermore, may be carried on the books at the lower of cost or market, with any of several methods used in the determination of cost, namely, last-in, first-out; first-in, first-out; average

cost; and base stock. Although these book or historical cost figures often influence the thinking of the parties to a sale, they are nonetheless of doubtful or little value as a measure of what the business is worth for purposes of sale. Businessmen should be concerned with the market worth of a business, not its book value.

By the very fact that a figure is of historical origin it suggests that there is little or no necessary relation to present economic worth. It is more appropriate to say that if book value does conform to real value the explanation is largely one of coincidence. This holds despite the fact that depreciation and depletion have been accounted for, since these are means of preserving dollar principal intact and not of better recording the market value of the properties.

Nevertheless, it was suggested above that the values shown on the balance sheet of a business often have subjective or psychological importance. For this reason they are usually taken into account in negotiations leading to the establishment of an acceptable price—a point which will be developed more fully later. It is a generally recognized fact that investors often take as their starting point in arriving at present economic value the amount of money which they have tied up in the particular property. Especially does this hold true when the offering price is below book value—that is, a "book loss" would be incurred. Although it can readily be argued that such an approach is irrational from a strictly business standpoint, to ignore the fact that it often prevails is to fail to have a thorough appreciation of the over-all problem of valuation.

"Replacement value," although superior to book value as a gauge of present value in one sense, namely, that it is based upon prevailing costs involved in reproduction, is also a defective representation of prevailing investment worth. The essential worth of existing property from a business standpoint is not directly a factor of costs of physical reproduction minus a reasonable allowance for depreciation but rather income-generating ability. In only an indirect sense can reproduction costs have bearing upon the present value of existing property, that is, by influencing the amount of competition that might be expected and thereby affecting the business's earning potential. In this same sense it may also place a ceiling on what would be offered since a buyer would never pay more for existing properties than it would cost to replace them intact plus an allowance for good will or intangibles of another sort. Replacement value would also be taken into account in determining the depreciation allowance that should be recognized in judging the profitability of the business. But beyond these things it can contribute little of practical worth.

"Liquidation value," by being the amount an owner could realize through forced sale, is the opposite of what one is trying to establish when

placing a value on operating properties. It does not contemplate the valuation of good will and other intangibles. Yet in this connection it sets a minimum below which a prospective seller would never go: rather than sell for less as an operating unit he would scrap the business and realize the liquidation proceeds. Such a situation, however, would be most extreme. If business properties are worth more as scrap than as an operating unit, it is unlikely that negotiations leading toward a sale would ever arise, which means that liquidation value as a minimum point would practically never be of significance. The fact that some stocks have been known to sell at less than even their per share value of working capital does not refute this statement, for in the purchase and sale of relatively small blocks of shares the alternative of liquidation does not exist since the shareholder has so small a voice in management.

The final and usually most significant consideration in valuing a business is its value in an operating or use sense. This is the "going-concern" value of a business and is based upon its ability to generate net income. The essence of the underlying idea is that it matters not what was originally paid for business property or what it would cost to replace it in physical terms; what does matter is how much profit an owner can derive from its operation. Since the ultimate financial purpose of business enterprise is to maximize profit, the real investment value of any property depends on how well it contributes to this end.

The Capitalization of Income Principle

Accepting the fact that going-concern value is sound in principle, the very difficult problem of putting it to practical application still remains. The other three values would seem to have the distinct advantage of being relatively easy to determine. Book value is always readily available, replacement value can usually be had without difficulty through the employment of competent appraisers, and even liquidation value can be calculated with a fair degree of accuracy by securing estimates from dealers in the markets that would be involved.

On the other hand, it should be recognized that although these values give the appearance of certitude by the way they are expressed, there is a substantial element of judgment in each. For example, the reserve for depreciation, which is a vital factor in determining book value, is a very arbitrary figure and may have no necessary relationship to the past accumulated loss of economic value. Although competent engineers and appraisers should be able to estimate replacement cost without too great error, furthermore, it is certain that some amount of blind guesswork will be involved. Also, if replacement cost is to be used as a judge of present value of existing property, it will have to be adjusted for a depreciation

allowance, which then introduces a substantial element of judgment. The judgment involved in determining liquidation value is particularly evident in the case of fixed assets for which there is no well-established market. But there is also uncertainty in connection with receipts from disposing of inventory and collecting receivables, especially when the liquidation has to be carried out under pressure.

But more than all this, we necessarily come back to the fact that aside from the degree of arbitrariness contained in these values they are bound by their very nature to fail to serve as a basis for judging business value. Despite the fact that a going-concern value is difficult to arrive at in definite monetary terms, it alone provides a basis for establishing fair market price and therefore must be approximated in some way.

The only means by which the going-concern-value concept can actually be applied is to estimate what the future net income will be on an average annual basis and to divide this sum by a given percentage rate. For example, an estimated average annual net income of $15,000 divided by a rate of return of 10 per cent would establish the present value of the property as $150,000. The process is known as "capitalization of income," but it should be noted that the word income in this term refers to *net* income. The word capitalization means converting a series of income payments into an equivalent principal value based on a desired rate of return. The student who has studied the mathematics of business and dealt with the present value of annuities should be familiar with the concept.

Two practical difficulties are encountered in applying the technique. First is the very difficult problem of estimating the probable future flow of net income on an average annual basis. The other is determining the appropriate rate at which this net income figure should be "capitalized." Methods of dealing with the first have to some extent been anticipated in Chapter 7, where conventional techniques for judging the profitability of a business were discussed.

To a large extent the analysis is necessarily historical in nature. Past earning figures are averaged out over a complete cycle on an annual basis. The assumption is that this is a reasonable starting point for estimating future earning potential. In addition, trend must be taken into account to determine whether or not performance has been changing consistently in any particular direction. To this consideration must be added the additional factors of general business prospects, competitive contingencies, technological and product developments, and general cost prospects—including labor conditions, availability of raw material supplies, and so forth. In the final analysis, the past earning record might be used unchanged, or it might be adjusted downward or upward sub-

stantially to allow for anticipated developments in one or more of these essential earning factors.

Actually the past is significant only as it is a good measure of the probable future. The trend is meaningful only as it points the direction which future earnings are likely to take. The record and trend of past earnings are probably most influential in shaping value judgments in the case of large established businesses. Their ownership is often spread among the general public, none of which owners is in a position to influence the course of earnings. Since they may lack an intimate and expert knowledge of the business, such public investors are obliged to rely heavily on the record of the past. In the case of small- or medium-sized businesses the belief of a prospective buyer that he can through his management make the future earnings larger than those of the past may make a business more valuable to him than to existing owners.

The rate of capitalization may be referred to as a mathematical expression of the degree of risk involved. Accordingly, it is difficult to determine precisely. Many different points may be considered in reaching a judgment. One would be the rate of return generally expected on investments that would seem to offer comparable risk. Another would be the reliability of the earnings estimate. If the business is a well-established, stable operating unit with a firm competitive position, estimation of its annual earning ability would be comparatively easy. Accordingly, the rate at which the earnings are capitalized could be reduced. A new, untried business undertaking, on the other hand, offers the ultimate in earning uncertainty, and the income estimate of such an endeavor should appropriately be capitalized at a very high rate.

Personal service businesses are generally valued at a very high rate of capitalization because of the low asset requirements and the consequent competitive dangers arising out of the relatively easy entry of new firms. Electric power companies, conversely, are likely to be valued at a relatively low rate because of their strategic economic character, stable earnings, and relative freedom from competitive inroads. Finally, general business conditions and the status of the general investment market must be taken into account. That is why no specific rates have been suggested with any of the business categories mentioned above: the standard rate of capitalization for a certain business type may change substantially over the years.

A common rule of thumb used in mercantile and manufacturing circles, however, is to capitalize earnings at 10 per cent. This rate may well be higher than the *average* return realized by ordinary businesses because of the poor earnings and capital losses suffered by many concerns. A well-informed person would expect this condition because the 10 per cent re-

turn must be "expected" in order to compensate for the risk of such losses. At a time when high-grade investment, such as government and corporation bonds, with but slight risk of default, are yielding only 2½ to 3 per cent, it is clear that the greater part of a projected 10 per cent return is "premium for risk," or compensation for assuming risk. Just as the insurance premiums are not all profit to an insurance company, we should expect a large part of the extra return in a 10 per cent rate to be offset by losses of businesses taken as a whole. The hope of the prizes of high return induces some to assume the risks that may "wash out" 100 per cent of their capital. This point is often overlooked by those who note the gains of successful business units and ignore the losses of the unsuccessful. Note that if one were in the business of drilling oil wells in wild cat, or unproven, territory and the chances were only 1 out of 5 of drilling a producing well, then a total return of 400 per cent would have to be realized from the one producing well before the loss of four dry holes would be offset. Or, to put it another way, the earnings of the one producing well must be enough to make it equal to the money sunk in five holes before the driller comes out even.

Clearly, there is no way to be absolute in the determination of an appropriate rate of capitalization. Recognition of all the associated factors and proper evaluation of their respective importance are at the heart of the process. That is why the whole problem of valuation, though approached in a mechanical manner, is ultimately resolved on the basis of sound business judgment. The capitalization of income principle is a useful device only for those who are sufficiently trained in general business practice and aware of the special problems of the particular business involved to appraise adequately the earning prospects and the related risk factors. Where an original valuation appears to have been in error, the fault necessarily lies not in the principle itself but in the judgment of the original party to the deal. Furthermore, even where a particular value seems to have been arbitrarily established, the essence of this valuation principle has been applied either consciously or subconsciously.

The study of the percentage relation between the market price of the stocks of large and small businesses in various fields and their past earnings will provide rates of capitalization that are informative. However, such rates are on *past* earnings, whereas the market is constantly looking ahead and trying to capitalize expected *future* earnings. Many apparent anomalies can be explained only on this basis. For example, the past earnings of some industry with a glamorous outlook, such as television, may be capitalized at times at some absurdly low rate such as 3 per cent because of expectations that are rosy as compared with the immediate past. A few years later the same industry may show companies with

earnings of 25 per cent on the market price of their stocks. The market would be forecasting and registering a belief in a lower level of earnings at such time. Such erratic relations make some skeptical of any studies of stock prices and earnings. Used with judgment and experience, however, the record of earnings lays a foundation for the intelligent appraisal of prospective earnings. Market prices of common stocks are the hard facts as to what people with money to invest are willing to pay for going concerns from time to time and under varying conditions of risk.

The Accomplished Value

Although capitalization of an anticipated flow of income is the basis for determining present investment, market, or commercial value, it must be recognized that the final value agreed upon in any sale of business properties is the result of a bargaining process among the parties involved. This is not to say that in the final analysis in practice the capitalization of income principle goes by the board; rather the principle is used to establish the separate values in the minds of those involved in the deal. Their ideas set the upper and lower limits, and somewhere within this range the final figure will be based upon the relative bargaining strengths of the buyer and seller.

The reason for the importance of this bargaining process in the reaching of the final value rests on the admitted approximate nature of the capitalization process. Since it is impossible either to forecast earnings with precision or to fix an exact capitalization rate, the buyer, say, will establish a rate in connection with an estimated earning figure below which he feels he cannot reasonably go. Anything above this will be just that much better. The seller, in turn, will have an upper limit in mind and will try to go as far below it as possible. Of course it may be that the point of bargaining will be not so much the appropriate capitalization rate as the anticipated future earnings. However, the two are largely inseparable. The buyer may well concede a shift upward in his earnings estimate if in so doing the final value allows a shift upward in his capitalization rate. That is to say, the value is still below that based upon his original earning estimate and minimum capitalization rate.

Valuation for a merger or the sale of a business is merely a subdivision of our general problem. Two concerns may wish to merge merely because the owners of one wish to retire and to recover their investment. The valuation might offer no new problem beyond those discussed. But suppose two businesses are contemplating merger in order to realize mutual benefit from certain operating economies that will make their combined earnings greater than the sum of their previous separate operations. The problem then is to value (1) the relative contribution of each

based on its past earnings and (2) the new earning power to be developed by the merger. The further problem arises as to the allocation of the values arising from the new earning power between the two merging companies. Neither can develop this additional earning power without the other. The two applicable rules here will be (1) neither contributor will knowingly take a share or participation in the merged business that gives him less than the existing value of his business as a going concern, and (2) the division or sharing in the additional values to be developed by merger will be a matter of bargaining.

Sometimes there is a tendency to ascribe more of this extra earnings contribution to one of the merging companies than the other. Thus, one company may contribute a wealth of physical assets, which have shown poor earnings but are expected to yield more after a merger. These assets may not be worth much in their present operation but in combination with the more successful business they may offer real value. This business, in other words, enjoys a strategic advantage in the merger that is beyond its potential as a separate enterprise. Sometimes this is regarded as a difference in "type of contribution" and is paid for by varying the form of participation in the merger. The business offering the assets may be given mainly a preferred stock type with a low rate of dividend reflecting the previous low rate of earning power plus some common stock as a share in the profits to be developed. The company offering the most in earning power will be given the majority interest in the common stock. The proportions of preferred and common could be varied to meet the requirements of equity in sharing prospective earnings, the bargaining position of the participants, and the desired status of the parties in the control of the new setup.

In cases of outright sale rather than merger, the relative bargaining strengths of the two parties will depend on any number of considerations. One important factor is the motive for sale. If the seller is hard pressed for one reason or another, he may be willing to make great concessions. For example, the widow of a recently deceased sole proprietor may have no financial resources other than the business properties she inherits and yet not be in a position to operate them successfully for income. On the other hand, if there is no urgency in the matter, the seller is likely to hold out until he "gets his price." A wealthy, middle-aged sole proprietor wishing only to retire would be a case in point.

These considerations, too, are counterbalanced by the motives of the buyer—the reasons for his wanting to purchase. They can vary all the way from a manner of more or less indifference to that of intense desire because of the strategic bearing of the particular properties on his future

plans and prospects. Because of the importance of these motivating considerations both buyer and seller will be inclined to give as much attention to the needs of the opposite party as to the economic value of the properties from his own personal standpoint.[1]

Up to now the buyer and seller have been treated as individuals, and for the purpose of presenting first principles that is as it should be. However, a very serious subsidiary problem to that of valuation is dealing with dissenting elements when the buyer or seller or both are multiowner enterprises. State corporation laws provide for stockholder approval before the business or a major part of the physical properties can be sold. In most states the number of stockholders that must consent is two-thirds. Because of its legal nature, all the members of a partnership must agree to such a radical step.

Where minority stockholders feel aggrieved over a plan to sell the business or merge it, they may demand the protection of the courts and an appraisal of the business. They are then entitled to payment in cash for their share of such valuation. Where the settlement is for more than the previously agreed price, this may subtract so much from the share of the consenting majority. Sometimes rather than face delay and the uncertainties of legal action, the interested parties may buy off the dissenters by paying some premium for their interest. Sometimes, however, these dissenters are looked upon as "strikers" seeking to profit from troublemaking, and the majority refuse to treat with them on the grounds that to do so would be unfair to the rest. Foreseeing such trouble, approval of a plan for merger or sale may be made contingent upon no objections being raised within the period allowed by law for the registering of such dissent. Obstreperous dissenters may prevent the execution of a genuinely advantageous plan. On the other hand, the legal protection of minorities

[1] Interesting insight into the motives of such buyers and sellers is contained in the article "Taxes and Mergers" by J. Keith Butters and John Lintner (*Harvard Business Review*, Vol. 29, No. 2, March, 1951, pp. 66 and 67). The article is a partial result of a general survey made by the authors of a sizable number of sales and mergers. Among other things they conclude as to selling motives: "From the *long-run* viewpoint the effect of taxes in such cases might more properly be described as accelerating the sale rather than as causing a sale that would not otherwise have been made. . . . When the tax motivation exists from the seller's standpoint it generally rests on one of two reasons. (1) The need for liquidity to pay estate taxes and (2) the desire to realize appreciation subject only to the capital gains tax and convert the investment to a generally safer point. . . . Among the nontax motivations for the sale of the companies visited in our field surveys, management considerations were important for all sizes of companies, but especially for the smaller companies. The desire of an owner-manager to retire, his ill-health or death, and the lack of adequate management succession were the most frequently recurring and impelling management reasons for sale, though a variety of other related motivations were encountered."

makes it necessary to give them the protection of the courts where dissent seems logical to them.

Determining the Form of Sale

The problem of whether a sale shall be based upon the physical assets or outstanding stock is limited to cases of corporations as sellers. There is no choice with other forms of business organizations. Furthermore, the problem mainly centers in the tax considerations growing out of the possible double taxation of corporate income.[2] If the physical assets are sold at an advance over cost and the proceeds then distributed to the stockholders, the gain realized would be subject to both a corporation capital gains tax and a personal capital gains tax. On the other hand, if the stock is sold directly, the seller need pay only one tax but the buyer is then denied the right to amortize this higher cost as part of his future operating expenses. He acquires the assets, rather, at their book value and can use only his purchase price as his basis for calculating gains or losses on subsequent resales of the stock. This basic conflict of tax interests between buyer and seller is, of course, just the opposite when the sale price is below book value rather than above.[3]

Although the seller is predominantly interested in the form of sale from this tax standpoint because of his single interest in netting the largest possible amount, the buyer is likely to approach the problem more from other considerations. According to the findings reported by Butters and Cary,[4] the two most important desires of buyers in connection with the form of sale were avoidance of possible antitrust implications and avoidance of liabilities of the seller. Both these objectives encourage the purchase of assets rather than stock. With a change in the Federal antitrust laws in 1950, however, making acquisition of property just as susceptible to legal restraint as acquisition of stock, the avoidance of the seller's liabilities now becomes the dominant buyer consideration for favoring an asset sale.

[2] It should be noted, however, that the problem of dealing with recalcitrant minorities, mentioned in the immediately preceding pages, may sometimes be reconciled by a sale of the controlling interest of stock rather than the assets. This is because the minority stockholders would, of course, have no voice in the sale of stock held by others.

[3] A very thorough analysis of these tax considerations is contained in "Motives Affecting Form of Sales and Purchases of Businesses," by J. Keith Butters and William T. Cary, *Harvard Law Review*, Vol. 64, No. 5, March, 1951. The basis for the findings reported is the same survey as was relied upon in Butters and Lintner, *op. cit.*

[4] *Ibid.*

Clearly the form of sale will be determined in the final analysis by the respective bargaining positions of the two parties and the relative strength of their respective motives for desiring a specific type of sale. Should there be substantial capital gains involved, for example, and little or no danger attached to the assumption of the existing liabilities by the buyer, there would probably be no serious opposition on the part of this party to the purchase of stock. On the other hand, if the interests of the buyer and seller in the form of sale are substantially in conflict, the final settlement will be based, as in the case of valuation, upon the respective concern of the two parties in getting the deal settled. No general rule or procedure can be established; the settlement will have to be determined at the time on the basis of the particular circumstances existing. There is, of course, always the possibility of compromise wherein concession is made on one point to secure an advantage on another.

Mention should be made at this time of the "statutory merger" approach, whereby stock or other securities of the acquiring concern are given in exchange for the outstanding stock of the seller. This latter company thereupon ceases to exist as an independent unit, and its total assets and liabilities are taken over by the other. The procedure gets its name from the fact that it can be accomplished only under terms provided by state law. It does not seem to have been relied upon very extensively in recent years.[5]

Determining the Means of Payment

The problem of determining the method of paying for the properties once the value and form of sale are agreed upon arises on two scores. First is the matter of the medium itself: Shall it be cash, an ownership interest in the buying company, a debt obligation, or some miscellaneous type of property, including securities of other companies? The interest of the seller as well as the buyer is tied to this question. Second is the source from which any cash payment will be acquired: one's own savings, borrowings, insurance proceeds, etc. To a great extent this question is settled on the basis of availability, but other considerations enter in along the lines developed in past chapters, namely, comparative cost, flexibility, and protection of control.

Considerations Governing the Medium Used

One of the major factors bearing upon the choice of media is the relative size of the transaction. If the value agreed upon is high in relation to the buyer's ability to pay, the need for at least a partial noncash payment

[5] *Ibid.*

is generally called for. It was even suggested earlier that by cooperating with the buyer in the form of payment the seller is likely to get a much better price than he would otherwise. A situation of this sort may be settled in any number of ways, but a reasonable arrangement would be for a substantial part payment to be made in cash and the remainder covered by the seller's taking a promissory note of the buyer or preferred stock or a limited partner's interest in the business, depending upon the form of organization. If the business is not too well established, a senior ownership interest would be preferable to a debt obligation, but the seller would have to be offered special encouragement to agree to this in the form of contingent participation in surplus earnings or voting privilege should the business deteriorate in operating performance.

Although the seller customarily favors cash settlement, the use of stock or an ownership interest as a means of payment would be possible in those special cases where the seller voluntarily wishes to maintain a close relationship with the continuing business. Such a situation exists, for example, where a merger is contemplated for the purpose of realizing operating economies and the owners of the business being acquired intend to preserve a major interest in the combined organization. Even where there is an outright sale and no intent on the part of the seller to engage in a merger, he may still want to hold a partial interest in the surviving business rather than settle entirely for cash. A single proprietor, for example, wanting to retire from active participation in management may nonetheless wish to keep an investment position in the business for the sake of either income or sentimentality. In other words, we can say that the motives of the seller influence the form of payment as well as the ultimate value and form of sale.

It is not uncommon for a business to be acquired by a larger one for the purpose of securing managerial talent as well as assets or an operating position. This presumes, of course, that the management is at one and the same time the owners of the smaller business. In such a case, a premium price which would be paid for in stock of the larger company is a particularly suitable arrangement since it would provide inducement to the seller to agree to the change-over and yet would not saddle the surviving company with any serious financial drain. On the other hand, a buyer might be interested only in the physical properties and competitive position of another business and might consider the management as more of a nuisance than anything else. Under these circumstances a temporary strain in the form of making complete cash payment or incurring a debt obligation might result in greater benefit in the long run. Butters and Cary [6] found that "The most powerful nontax motivation

[6] *Op. cit.*, p. 726.

causing buyers to prefer to make payment in cash is the fear that payment in stock would jeopardize their operating control of the merged companies."

If the property to be acquired is only part of an existing business enterprise, the likelihood of making use of noncash means of payment is not as great as with the purchase of complete business units. For one thing the seller will in most cases have no reason for maintaining close ties with the buying business. This does not mean that the buyer might not resort to additional financing as a means of acquiring the money to be used; it means only that the seller is much less likely to accept stock or notes himself. Only too often a major reason for selling parts of one's total property is to build up the cash fund, and so nothing but cash would be suitable.

Finally, if the capital gains tax liability resulting from the sale is large in relation to cash on hand, the seller will be forced to hold out for cash or property in the form of marketable securities that could readily be converted into cash. Should this problem not be anticipated and the seller accede to a large part of the payment being made in notes or stock with a limited market, subsequent pressure to pay the tax might force liquidation of other possessions and thereby partially nullify any gains made from the original sale. Because of this and the other vital considerations mentioned it must be recognized that the means of payment will almost inevitably be a basic part of the bargaining considerations along with the determination of the value and the form of sale.

Sources of Financing Help

Where a substantial part of the purchase price is to be settled in cash, the problem necessarily arises as to how it should be raised. Only in the case of individuals is it likely that the funds can be had from existing resources. Business enterprises would ordinarily not have such excess cash available. An exception to this statement is where a sinking fund has been accumulated for the precise purpose.

There are no new problems introduced, however, for financing the purchase of a business is no different from financing a new business or an expansion program. But there are certain methods which enjoy special virtues. A term loan from a commercial bank or a life insurance company, for example, may be ideally suitable. The term could possibly be arranged so that the earnings from the new business could largely cover the annual installment payments and thereby pay for itself. In this way the incurrence of a permanent fixed-charge burden could be avoided and the capital structure gradually simplified to provide for additional

financing in the future if need be. Somewhat the same general attributes would hold for a serial bond issue.

If the transaction is not too large and the future prospects somewhat uncertain, recourse to a loan from a finance company might be in line. As was pointed out at the time of their discussion, these companies specialize in somewhat higher risk financing on the basis of close follow-up and varied means of participation in earnings. It is not uncommon for them to extend what amounts to venture capital in return for a chance to profit from future successes. Along this line, too, it might be possible to get help from some private or community investment development company.

For much larger undertakings, the buyer will have to turn to large-scale borrowings from some institutional investor (private placement), particularly life insurance companies, or rely upon a public flotation through the services of an investment banker. In this latter approach, either bonds or stock might be used. If preferred stock, then the funds could be raised without incurring the burdens of a fixed charge, and yet control might be protected against excessive dilution. Of course, such a happy solution as this would require compensating business prospects and an investment market sympathetic to the type of instrument.

Summary

For any number of possible reasons the ownership of business enterprises and individual business properties changes hands from day to day. A single proprietor or major stockholder or partner may die or wish to retire from active participation. One business might buy out another to improve its competitive position. Two or more companies might merge to realize mutual benefits from resulting economies. Regardless of the cause, the fact of exchange presents three essential financial problems which must be successfully resolved. One is the determination of the value at which the sale or exchange is to be consummated, another is determining the form the sale should take, and the third is determining and providing the means of payment.

Although there are many types of value to which individuals might be tied through some psychological attachment, there is only one that offers any really rational basis in the case of a sale or exchange. It is the value that is based upon the earning potential of the properties involved and is specifically calculated by discounting a presumed future flow of net income at a given rate of return. This is not to say that the process is without complications and always capable of straightforward mathematical calculation. Both the estimated net income and the appropriate rate of

capitalization are matters of judgment and subject, therefore, to wide variations depending upon the interests and training of the particular calculator. In the final analysis any value ultimately agreed upon will be the product of bargaining by both parties involved. The capitalization of prospective income, in other words, will serve not as a means of exactly determining the final value to be assigned but rather as the approach to be used in determining the range within which a final figure will seem reasonable.

Whether the sale shall involve the physical properties or the voting stock is a problem which is largely of concern to the corporate seller because of capital gains tax considerations. Whereas the tax interest of the buyer is also somewhat involved, he is likely to have equal, or even greater, concern with the danger attached to assuming existing liabilities of the seller under the stock method of acquisition.

The means of paying for the established price also has significance to both buyer and seller. The buyer is of course concerned with his ability to pay, possible alternatives to outright cash payment, and possible sources of financial help should substantial cash payment be demanded. The motives of the seller will greatly influence the type of media he will accept and the extent to which he will try to cooperate with the buyer in working out feasible methods. In addition is the compelling factor of any capital gains tax. A cooperative spirit may be hampered if the pressure of such a tax compels heavy settlement in cash. The material covered in the preceding chapters on methods of financing is particularly applicable to the problem of arranging the most appropriate means of payment.

An Illustrative Case

The material in this chapter is likely to seem of such an abstract character that some practical application is fitting. The following illustration is therefore offered to provide some help in this regard. Though some of the points have been fictionalized, the essential facts are true. However, it should be recognized that no single situation could possibly serve to bring out all the separate points discussed above.

Statement of Facts

The Soyana Milling Company (fictitious name) was a small grain storage and milling company located near one of the thriving grain regions of the Middle West. Under the management of the senior stockholder and grandson of the founder the company prospered and enjoyed a respectable reputation in the field. However, this individual died suddenly in 1948, leaving no one suitably trained to carry on in his place.

Under pressure of the circumstances one of the heirs gave up his own vocation to assume management of the business. He was soon faced with peculiarly adverse conditions. Soon after his assumption of control, the prices of soybean meal and soybean oil, two of the company's principal items, began to drop rather drastically for the first time since 1939. Also, the flour milling business, which at one time was the mainstay of the company's operations, had to be discontinued. And to make matters worse, one of the principal grain elevators was completely destroyed by fire.

Notwithstanding these adversities, the new manager proceeded to make drastic changes and improvements. He introduced a modern record and cost accounting system. He rebuilt the burned-out elevator, introducing several innovations. He trimmed many costs, including those associated with the old flour milling operation, which had consistently incurred net losses because of its obsolete character. And he introduced, under pressure from the banks, the practice of hedging his grain purchases through the futures market on the Chicago Board of Trade. His predecessor had avoided this practice in favor of relying upon his own judgment of price

TABLE 1

SOYANA MILLING COMPANY

Balance Sheet, June 30, 1950

Assets		*Liabilities and Net Worth*	
Current assets:		Current liabilities:	
Cash	$ 12,500	Accounts payable	$ 26,000
Accounts receivable	41,000	Accrued payroll	1,000
Inventories	101,000	Note payable—owner	34,500
Federal tax refund	4,000	Accrued taxes	22,000
Total	$158,500	Total	$ 83,500
Fixed assets:			
Land	$ 18,000		
Buildings and equipment	656,500		
Less reserve for depreciation	236,000	Capital stock and surplus:	
Net property	$420,500	Common ($100 par, 1,500 shares authorized and issued)	$150,000
		Earned surplus	373,500
Total	$438,500		
Other assets:		Total	$523,500
Deferred charges	$ 5,000		
Miscellaneous	5,000		
Total	$ 10,000		
Total assets	$607,000	Total liabilities and net worth	$607,000

movements and had enjoyed remarkable success in this speculative activity.

As a result of these changes and the favorable market change that accompanied the commencement of the Korean hostilities in the summer of 1950, the business began to evidence decided improvement. Although operations for the fiscal year ending June 30, 1950, resulted in an overall net loss, the latter months showed profits which could not be explained on the basis of the seasonal pattern alone. It was estimated that with grain prices persisting at the level of June, 1950, the company could reasonably be expected to realize annual net profits of $60,000 to $80,000. It was further estimated that with oil selling at 20 cents per pound and meal selling at 4 cents per pound a profit could be realized in the vicinity of $100,000.

At this time the family began to give serious thought to the prospects of selling the business. Three factors combined to bring about this inclination. First, the management of the business involved too many specialized problems to make it suitable for a family-managed proposition. Second, no one member of the family was sufficiently interested in the business to take it on as a permanent and full-time undertaking. And

Table 2

Soyana Milling Company

Condensed Statement of Profit and Loss for Years Ending June 30

Item	1947	1948	1949	1950
Sales	$3,276,000	$3,563,000	$2,014,000	$1,336,000
Less operating costs	3,122,000	3,473,000	2,110,000	1,386,000
Net operating profit (loss)	$ 154,000	$ 90,000	($ 96,000)	($ 50,000)
Other income	2,350	2,700	2,500	5,000
Total net income (loss)	$ 156,350	$ 92,700	($ 93,500)	($ 45,000)
Other deductions	350	200	500	3,000
Net profit (loss)	$ 156,000	$ 92,500	($ 94,000)	($ 48,000)
Federal tax refund due to carry back of loss	....	....	$ 33,500	$ 4,000
Net profit (or loss) to surplus	$ 156,000	$ 92,500	($ 60,500)	($ 44,000)

finally, feelers had been sent out by a large milling and feed company as to the family's interest in selling.

This larger company was interested in acquiring the property for several reasons. (1) The area was a very important soybean producer, and this company had no facilities located nearby. (2) To construct comparable facilities in the area would have cost in the neighborhood of 1 million dollars. Except for the processing plant and old flour mill, the fixed facilities were very well constructed and in excellent condition. The elevators were relatively new and of the highest quality construction. (3) This company was itself closely controlled and was seeking means of legitimately employing its retained earnings as a means of avoiding penalties under section 102 of the Internal Revenue Code.

Tables 1 to 3 contain essential supporting financial data. Several explanatory statements need to be made in connection with the financial statements. The substantial drop in sales from 1948 to 1949 was largely due to the termination of the flour milling business. The continued decline in 1950 was caused by the drop in prices for the company's prin-

TABLE 3

AVERAGE ANNUAL PRICES OF SOYBEANS, SOYBEAN MEAL, AND SOYBEAN OIL, 1939 TO 1950

Date	Soybeans per bushel	Soybean oil per pound	Soybean meal per ton
1938–1939	$0.67	4.8¢	$26.00
1939–1940	0.81	4.9	28.90
1940–1941	0.90	7.0	30.50
1941–1942	1.55	11.2	41.85
1942–1943	1.61	11.8	42.80
1943–1944	1.81	11.8	51.90
1944–1945	2.05	11.8	52.00
1945–1946	2.08	11.9	62.40
1946–1947	2.57	22.9	81.10
1947–1948	3.34	23.8	91.60
1948–1949	2.27	13.1	76.40
1949–1950	2.08	15.8	
June, 1950	3.13	17.1	73.50

SOURCE: Bureau of Agricultural Economics, U.S. Department of Agriculture, as reported in *The Soybean Blue Book, 1950* American Soybean Association, Hudson, Iowa. 1950 data from *Survey of Current Business* and *Wall Street Journal.*

cipal end products, soybean meal and soybean oil, together with a decline in unit output. This can be illustrated by Table 4.

TABLE 4.

SOYANA MILLING COMPANY

Amount of Beans Crushed, Average Cost of Beans, and Average Prices Received for Oil and Meal, Fiscal Years Ending June 30

Item	1947	1948	1949	1950
Beans crushed, bushels	133,000	247,587	268,810	210,797
Average cost of beans, per bushel	$2.85	$3.48	$2.56	$2.19
Average price for oil, per pound	23.34¢	24.00¢	16.35¢	10.20¢
Average price for meal, per pound	4.6¢	4.5¢	3.9¢	3.5¢

The unstable nature of bean prices in 1949–1950 contributed further to the loss in the fiscal year 1950 by being responsible for a loss of $36,000 on the company's hedging operations. And finally, although the fire loss in fiscal year 1949 was covered by insurance, the company still had to carry $7,000 of the loss itself.

A straight average of the profits for the four years after allowance for the Federal income tax adjustments is $36,000. If adjustments be made to the losses of 1949 and 1950 for the two irregular factors just mentioned, the average would be $46,750.

Suggested Solution

Anticipated Earnings. Since the four years covered by the profit and loss statements shown in Table 2 are not very representative of what might be expected in the future, not too much help can be gained from this source. The adjusted average of $46,750 given above is not fair on the high side because the profits of 1947 and 1948 are not at all representative of what the company might be expected to do in the future. They are influenced by flour sales, which are no longer an item, and by speculative trading in the soybean market, which has been avoided under the new management. Conversely, the losses for 1949 and 1950 are not very indicative of future potential. And it would be overpresumptive to conclude that unrealistic profits of 1947–1948 and losses of 1949–1950 just balance out.

Since in the past two years the company has been placed on a completely new footing, it is more reasonable to rely upon current operating

performance and prospective performance at assumed prices than to attach automatic significance to past results. The estimates of $60,000 to $80,000 annual net profits at June, 1950, prices and $100,000 net profits at 20-cent oil and 4-cent meal should be taken as best guides to the company's future earning ability.

Rate of Capitalization. Because of the complete change-over that has taken place in the company during the past two years, it must be looked upon in somewhat the same uncertain stage as a new business, despite its long existence. This together with the unfavorable showing in the last two years could not possibly justify a rate of capitalization less than 10 per cent. On the other hand, its well-established position in the community, combined with the good will of the farmers as well as the banks and other business establishments in the area, would not justify a rate in excess of 25 per cent. By calculating the capitalized value of the different profit figures at separate rates within this range, one could arrive at a value schedule as shown in Table 5. This schedule shows a range of

TABLE 5

Rates of capitalization, per cent	Values at different anticipated profit levels		
	$60,000	$80,000	$100,000
10	$600,000	$800,000	$1,000,000
15	400,000	533,333	666,667
20	300,000	400,000	500,000
25	240,000	320,000	400,000

values from $240,000 at the low point ($60,000 at 25 per cent) and $1,000,000 at the high point ($100,000 at 10 per cent). Taking into consideration all the circumstances involved, that is, past history and uncertainties for the future, it would seem that a reasonable final value would be somewhere between $400,000 and $500,000. By reference to Table 5 it can be seen that this would require earnings of $80,000 to $100,000 at a 20 per cent rate or $60,000 to $80,000 at a 15 per cent rate. To look at it another way, if the business were bought at $450,000, it would have to earn $67,500 per annum on the average in order to produce a 15 per cent return.

This would seem to be a reasonable income expectation and risk to assume. To require higher earnings would necessitate the expectation of

prices not in keeping with past conditions and future prospects based upon the record shown in Table 3. And to use a lower rate would fail to allow suitably for the special risks accruing from the unsettled nature of the business. To expect lower earnings, however, would be to fail to allow for the general higher price levels since the Second World War and the operating improvements made in the business. And to use a higher rate of capitalization would be to fail to account for the company's established position in the community.

Motives of the Seller. The seller is not under any great pressure to sell. There is no urgency for liquidation to meet estate tax liabilities. There is a lack of interest in continuing control rather than an active desire to sell. Therefore, the family is in a relatively good bargaining position. On the other hand, the book value of the ownership interest is purely a historical bookkeeping figure and carries little or no significance to the family.

Motives of the Buyer. Since the buyer wants to acquire the property to expand its general operations in the area, improve its vertical integration by having greater access to soybean production for its feed operations, and employ its retained earnings without penalty so as to avoid double taxation, it has a very positive interest in acquiring the properties. Since it would cost 1 million dollars to duplicate Soyana's physical properties, this plus a reasonable figure for the current assets might be looked upon as the outside figure to which the purchaser would be willing to go. Of course, even this would be unreasonable on two scores. First, the existing properties are not all new, and, second, the exact facilities would not be duplicated.

On the other hand, from the earning standpoint, the anticipated profit analysis developed above is on the conservative side from the standpoint of this particular buyer. Since it is contemplated that much of the output will be used directly in the company's own feed products, dependence upon given prices for soybean oil and meal is not as great. In other words, it could afford to pay more than someone considering buying Soyana for its own operations alone because of the possible advantages to be gained from the vertical integration.

The Final Value. Although a reasonable price for the Soyana Milling Company on the basis of capitalized earnings alone would be $450,000, under the circumstances of the particular contemplated sale it would seem that $500,000 would be more reasonable. The seller is in an advantageous bargaining position to hold out, and the buyer has more to gain from the purchase than the net profits realizable only from Soyana's operation. On net balance, in other words, the bargaining advantage rests with the seller, and so more than the straight capitalized value can be expected.

Because any final value is necessarily the result of the bargaining strengths of the parties involved, which can never be anticipated exactly, it may be unwise to suggest a particular figure, as has been done here. The most that can be done in an objective way is to establish what seems to be a reasonable range within which the final value should ordinarily fall. We have gone beyond this point, however, in order to provide the reader with some more definite idea as to just what is involved in reaching a final figure.

The complementary problems of form of sale and method of payment are not at all significant in this case. Since the value is slightly below book value, the tax problem is not a serious one. Nor are the liabilities of any such character or consequence as to dictate the purchase of stock instead of physical properties. The most determining factor in this regard is that Soyana is not wholly owned, and so sale of the controlling stock interest by the family could avoid the need of securing minority stockholder approval. As for the means of payment, both parties would prefer cash. The seller is not interested in maintaining any continuing interest in the business, and the buyer has the ability to finance the $500,000 requirement on its own.

Questions

1. Contrast the major types of value employed in business jargon.
2. What is the essence of the capitalization of income principle?
3. "Although this procedure gives a semblance of great accuracy because of its mathematical approach, it is highly influenced by personal judgment." Explain thoroughly.
4. "Despite its speculative character, the capitalization of income approach is the only one that is really based upon the realities of business operation and, as such, provides the only effective guide to fair value." Explain.
5. Explain the statement that the rate of capitalization is a mathematical expression of the degree of risk involved.
6. Why may the final value agreed to in a sale or merger differ from that which each party calculated separately by application of the capitalization of income approach?
7. Of what significance is the form that a sale of business properties might take?
8. What are the different types of payment that might be employed in a sale of business properties, and what are some major considerations bearing upon the use of each?

Chapter 23. REMEDIAL ACTION FOR FINANCIAL STRAIN OR FAILURE

Meeting the problems of financial strain and failure has a number of aspects, legal and socioeconomic as well as financial. Considerable attention in finance is often devoted to legal aspects and details because of their importance in conditioning the appropriate financial solution. The subject also has substantial social implications and appeals strongly to the individual with ordinary curiosity about our economic life. Just as we are prone to wonder when learning of the death of an acquaintance, "What did he die of?" so when we hear of a business that is suffering from financial strain or is on the verge of "death" we wonder, "What is the cause?"

The current chapter will naturally concern itself almost entirely with the financial aspects. It will assume the financial difficulty as given and consider the type of financial treatment available under each circumstance, leaving the legal ramifications for the specialist in that field. The approach will again be that of a businessman faced with a given situation and having to choose from among several alternative arrangements. It is up to him to know the possible avenues open to him and to be able to appraise their respective financial virtues. In any particular case legal counsel should ordinarily be called in to advise as to the specific legal problems involved and to carry through the particular plan chosen.

Although it is true that any remedial action must get at the cause rather than merely treat the symptoms if it is to be at all effective, still it must be recognized that the precipitating incident or condition is in nearly every case somewhat distinct from that of any other. Therefore, instead of a general discussion of the various causes of business failure with their implications for our economic society, reference to cause will be made only where it relates to a particular type of financial treatment. The important thing from our standpoint is that the businessman in every such case stands to lose all or the greater part of his investment, to say nothing of the community respect; and specialized treatment to remedy the particular situation is of the essence.

In a sense the subject at hand is no different in kind from that which we have considered in the preceding chapters—only in degree. The twofold objective of business management that has been stressed all along is that of maintaining solvency while maximizing profits. Financial diffi-

culty arises when a specific weakness develops in one or both of these areas—when management has failed, for one reason or another, to cope adequately with the demands placed upon it. In such a case it is no longer a matter of *maintaining* solvency but of *recovering* it; of *maximizing profits* but of *safeguarding investment.*

The severity of the difficulty will, of course, differ in degree; and the appropriate remedial action will vary accordingly. For purposes of discussion, therefore, the classes of remedial action may be grouped under three headings, (1) those which are available to relieve financial strain only, (2) those which might be relied upon if insolvency is imminent, and (3) those which may be used when failure (or technical insolvency) is a realized fact. The first situation is characterized by a strained financial position in which there is no immediate threat to solvency but for one reason or another the business's ready access to credit under reasonable terms has been impaired. The three general financial conditions which give evidence of trouble in this first category are (*a*) an excessive short-term debt and a weak current position, (*b*) an intermediate- or long-term debt which the business is having, or expects to have, difficulty in paying promptly or is able to pay only at the expense of a seriously deteriorating current position, and (*c*) an accumulation of unpaid preferred dividends. These are listed in the order of their seriousness. The weakening of current position is the most serious and the most likely to lead to the need for financial remedies of a harsh sort. Preferred arrearages never cause actual insolvency but are undesirable because they may impair credit standing and may affect the control of the corporation. Claims of limited partners may also accumulate and bear a family resemblance to preferred arrearages.

The situation of imminent insolvency is represented by a company which has an obligation of one sort or another coming due and no means of an ordinary operating sort with which to meet it. Such a condition may result from improvident financing in the past—that is to say, financing without adequate planning—or a slowing up of the circuit flow of funds which would have the effect of frustrating original plans. The change in the rapidity of the circuit flow could in turn be explained by a change in general economic conditions, a change in consumer tastes, an increase in competition, and the like.

Finally, failure, the third situation, arises when failure to pay a maturing obligation is evidence that technical insolvency is a realized fact and creditor action threatens to take the initiative for remedial action out of the hands of management. The fact of default still may not justify summary liquidation and dissolution of the business, however. When failure occurs there are two general alternatives: sell off the assets piece-

meal and end the business as a going enterprise, or adjust the debts in such a manner that the business can continue to function. The latter course will be chosen in those cases where it appears that those with funds tied up in the failed business will realize more in the long run. For example, there may be basic economic justification for the existence of such an enterprise, but overcapitalization, an improper choice of financing methods in the past, a temporary excessive dissipation of current funds, or any other such financial failure of an acute sort may have provoked the immediate embarrassment. In such a case the creditors stand to gain from a plan that will protect the properties and operating position of the business without jeopardizing the legal claims unduly.

Possible Types of Relief for Cases of Financial Strain

Excessive Short-term Indebtedness

We have already seen how this condition may cause slow pay to creditors, resort to the most costly credit channels, weakness in meeting temporary business reverses, and inability to expand operations or take advantage of profit opportunities requiring cash or further credit. Not only may the company's ability to finance reasonably a desirable expansion be hindered, but even the financing of ordinary current asset needs may be jeopardized thereby.

The excessiveness of the short-term indebtedness may take two forms: it may be excessive in amount or excessive in kind. In the latter case (which is the less important) too many different types of debt could have been incurred so that even though the total amount may not be out of line, the servicing of the different obligations plus keeping abreast of their various provisions becomes burdensome to management. The very existence of a wide variety of debt arrangements also may interfere with normal creditor relations. A plan that is often adopted to relieve such a situation is one in which a bank or other lender will enable the business to "consolidate" its debts by granting a single loan the proceeds from which will be used to pay off the existing creditors. In order to accomplish this end of consolidation, the debtor will have to be able to assure the bank that it will use the proceeds for that purpose alone. This requirement usually does not offer any serious difficulty inasmuch as the lender can protect itself through the terms of the agreement or even arrange for the old debts to be paid off directly through its own offices.

When the principal difficulty arises out of an excessive amount of short-term debt, the problem is somewhat more difficult than that discussed above, for remedy involves some form of adjustment of original contractual rights. If there is a variety of claims in addition to the

heavy amount, one approach that may be followed is to get certain groups to agree to a "subordination" of their claims. This would mean that in the event of insolvency and subsequent liquidation they would participate in any proceeds only after the other creditors had been paid in full. The position of a subordinated creditor, in other words, is midway between a general unsecured creditor and an owner. The process makes possible the incurring of additional debt for some essential financing purpose when the composition of the financial structure might otherwise prohibit it. Unless the business is reasonably small and some of the creditors especially interested in the welfare of the business for one reason or another, this device may not prove feasible. Acceptance by particular creditors of a sacrifice of legal right to the special advantage of other creditors requires a cooperative spirit which in most cases could be found only under these two conditions. Subordination, consequently, has been employed successfully mainly in relatively small companies where some of the short-term creditors are officers, relatives, or associates and friends, and the number of these cases is small.

A plan which is somewhat similar in effect to that of subordination is having some of the short-term debts converted to an intermediate- or long-term duration. This can be accomplished either by having the original debtors agree to a lengthening of the loan term or by using the proceeds of a new long-term indebtedness to retire the short-term. In either case the process is known as "funding" of short-term debts. Unlike subordination, the claims of these new long-term creditors participate on a par with the other unsecured creditors in the event of liquidation, but as with subordination the end result of this funding process is to relieve the short-term credit position and permit the incurrence of new short-term debt. Often a business will initially finance a certain permanent expansion with short-term credit to the point that its current position is strained in carrying out its ordinary operations. In the event that the business has not already availed itself of long-term debt financing to a high degree, funding is ideally suited to coping with this situation.

Still another device that may be used when the business is operating under a corporate form and has an impaired borrowing strength further weakened by the limitation of owner liability is an "endorsement" of the note by an owner or officer. In such a case, the personal property of the endorser is added to that of the business in backing up this particular loan, and the holder of the endorsed note is in a more protected position than the existing unsecured creditors. The fact that the corporation itself has excessive short-term debt outstanding is not grounds for denying it further credit, therefore, unless the responsible owners or officers either are unwilling to endanger their personal assets or are without adequate

resources of this sort to serve as additional support—that is to say, unless the opportunity for endorsement is lacking.

Excessive or Burdensome Type of Long-term Indebtedness

Much the same types of situation described above with respect to short-term indebtedness exist in the case of long-term as well. Though this is an exceptional situation, some companies have found their financing ability hampered somewhat by an excessive number of long-term creditor claims. Particularly have there been cases of this in the railroad field. Others have been hindered in their financing objectives by a dangerous proportion of fixed indebtedness. This is the most common malady of the sort. Still others are hamstrung by particularly burdensome indenture provisions which may not threaten solvency but nonetheless serve as unnecessary drains of liquid resources or interfere with adoption of a most advantageous financing program. This latter is represented by an unusually high coupon rate or a closed-end mortgage provision without the existence of a call option in either case.

The process of consolidation is just as applicable to the simplification of a complicated long-term debt structure as to a short-term debt situation and is relied upon quite often. Where the difficulty is an excessive proportion of long-term debt, remedial action is much more difficult to achieve. Generally a borrower on long term is of too large a size and the debtor-creditor reltaionship too impersonal to permit the seeking of relief through a plan of readjustment of the claims. The only solution to an excessive amount of long-term debt is to get a reduction by "retirement" or "substitution." But in such a case of strain the opportunity for retirement is denied either because the debt does not provide for early call or the company is without the financial means to retire the obligation by call or open market purchases. Substitution of the claim to one of an equity character, on the other hand, is generally not feasible because of the difficult of securing the cooperation of the creditors on a voluntary basis or because the investment position of the company does not justify the sale of additional equity instruments for the purpose of exercising a call option where this exists. Most often a defective financial position arising out of an inordinate use of long-term debt has to be endured and gradually overcome by substitution of equity through retained earnings or an improvement in the earning position of the company which would then make refinancing feasible.

Where a burdensome indenture provision in the form of an excessive coupon rate, mortgage provision, and so forth, cannot be overcome by retirement through call or open-market purchasing, the opportunities for relief are equally remote. The only possible avenues open are to get the

creditors to agree to a change of the indenture or an exchange of their claim for a new one. Since the terms of the indenture which are burdensome to the borrower may conversely be beneficial to the creditor, the likelihood of either of these approaches being accepted by the creditors is very distant. Only in cases of realized or imminent insolvency, as we shall come to see, where the lender stands to lose more by strict adherence to his legal right than by compromise, is it at all reasonable to count on such unusual cooperation.

Excessive or Burdensome Type of Senior Equity

The situation of a burdensome form of senior equity claim is somewhat analogous to that of a burdensome long-term debt. Although there is no possibility of default on any form of equity claim, still a very high preferred dividend rate or the accumulation of dividend arrearages on a cumulative preferred stock might very easily become a source of financial embarrassment in the sense that financing ability might be impaired. Relief of such a situation, however, is much more feasible than that of a debt obligation because of the less rigid rights of legal action available to senior equity interests.

A dictum of business finance is that the welfare of every investor in a business is inextricably linked to the welfare of the business itself. However, the rule applies with greatest force to the residual owners and decreases in applicability as the investor group becomes less dependent upon the earnings of the business and more dependent upon some outside factor. An example of an investor for whom the rule would have least force would be a secured creditor in which the collateral has a market value well in excess of the loan. Accordingly, such a creditor has more to gain from forcing full and prompt satisfaction of his claim even to the point of liquidation than would a preferred stockholder in the same company. Or, conversely, a preferred stockholder ordinarily has more to gain from cooperating to the end of protecting the operating strength of a company than do the creditors.

For this reason, preferred stockholders may be induced to surrender their original holdings in exchange for securities not having as strong a contractual position. By permitting the removal of a financial claim which acts as a deterrent to additional economical financing, these stockholders hope to improve the over-all operating position of the company and with it their own investment position. By voluntarily sacrificing a strict legal right, in other words, they stand to improve their own economic position. Such a voluntary readjustment of the stockholders' position is known in financial circles as a "recapitalization" to distinguish it from the involuntary "reorganization" forced through court action to remedy a condition of

insolvency. (In law, including income tax law, both are spoken of as reorganizations.)

The most common case in which a new stock claim is exchanged for the original is when dividends on cumulative preferred are substantially in arrears. Preferred or common stock might be offered in settlement of the arrears. Debt would be possible but is unusual. A new preferred for an increased amount of par value might be offered in exchange for both the old preferred and its dividend claim. In such an exchange the corporation might gain by reducing the dividend rate on the new as compared with the old preferred. Whatever the offer, it must be sufficiently attractive to induce the preferred stockholder to make the exchange. Exchange into the new preferred might be stimulated by making its claims prior to that of the old.

The corporation should be careful not to assume a new load of preferred dividend charges that will be excessive. Where earnings have been particularly erratic, the whole claim of the preferred may be exchanged into common stock. In such a case the old common is ordinarily allotted only a small part of new common stock, enough, however, to make it worth its while to approve the recapitalization plan.

Removing Balance-sheet Deficits

After a period of business losses a corporation may show an accumulated deficit in its balance sheet. Such a deficit rather than a surplus makes a bad impression on creditors and others who read the balance sheet. In most states the payment of dividends, at least to common stockholders, is forbidden until a surplus reappears. And so in some such cases a mild form of recapitalization may be in order. By suitable action amending the charter, the par value or stated value of the common stock may be reduced and an equivalent amount of capital surplus created. Then the profit and loss deficit may be eliminated, if the resultant capital surplus is sufficiently large, by charging the former off against the latter.

Of course, the improved financial position realized through this accounting legerdemain is purely fictitious. The financial countenance is in no way changed; its photograph is merely touched up to remove any blemishes. Nevertheless, if lenders or other interested parties are prone to give importance to names rather than substance and to give significance to the existence of a deficit beyond justification, then the need for such statement alteration is not only understandable but justifiable. However, in no case can it be defended if the end result is to weaken existing creditors' rights or circumvent the basic intent of the law.

In concluding this subject of relieving financial strain it should be recognized that although concern has been thus far with the possible

financial alterations that might be used to provide immediate relief, the problem may be approached also from the standpoint of overcoming the strain gradually through improvement of the operating strength of the business. This possibility has been ignored for the moment on the assumption that the strain involved in the cases cited is of a financing sort rather than an operating sort, although it should be admitted that the two are so interrelated that a fine differentiation tends to be unrealistic. However, the following discussion treats of the possible operating remedies in the case of imminent insolvency, and it may be noted that they are equally feasible in the case of financial strain. All the reader need recognize at this time is that financial strain or failure is a two-pronged affair—determined by financing practice on the one hand and operating strength on the other. And in connection with both these facets it is more important to plan realistically to avoid financial difficulty than to deal with the difficulty effectively after it becomes a realized fact.

Possible Remedies When Insolvency Threatens

It was stated in the opening of this chapter that imminent insolvency exists when an obligation is to mature in the near future and the debtor company is apparently without adequate means of a regular operating sort to make payment. Unless *special* action of some sort is taken, default seems inevitable. The most serious cases of maturing obligations are interest payments on long-term debt and principal maturities of short-term debts. Others are rental payments, sinking fund charges, and the like.

One of the most direct ways of trying to relieve a situation of impending principal maturity is by negotiation with the creditor involved for an *extension* of the maturity date or a renewal of the original loan. In many cases of real difficulty an extension is likely to be most appropriate. Renewals are mainly employed by lenders who may not have expected the loan to be paid off in the first place but entered into a short-term arrangement in order to be protected by an early maturity in case conditions changed against the borrower. However, in such cases the borrower should have an understanding in advance. Without such agreement, he is in a weak bargaining position and, in any case, is regarded as a less satisfactory credit risk because of a failure to care for a matured debt in the ordinary way.

If the business has had a good credit record and the cause of the difficulty is clearly temporary and can readily be explained, it will ordinarily encounter little difficulty in securing the cooperation of the creditors. In granting an extension of time, however, the lender might

well demand the making of certain warranties in the form of dividend restrictions, limitations upon additional debt, pledging or assignment of physical properties, and the like. He will also want to extend only for short periods of time with the idea of discontinuing the cooperative policy if improvement is not shown. To make a long extension without close follow-up would be to accept a plan insufficiently in keeping with the potential risks inherent in such a situation.

If, on the other hand, the difficulties giving rise to the strained situation appear to be of a chronic sort, an extension will be most difficult to obtain. The objective lender will realize that it would merely be postponing the fateful day to his own detriment. Were he to accept the inevitable and force compliance immediately, he might receive in settlement only a partial payment of his claim; but even this would be better than would result if additional time were granted only to have the assets further dissipated.

Whether or not the condition is really a temporary or chronic condition is, of course, very difficult to judge. The businessman will invariably be optimistic and give attention to the more promising aspects of the picture, regardless of how slight the hope of recovery may be. Often, too, the lender will be influenced by the borrower's persuasion and give in to his own innate desires not to force immediate action. The possibility of having access to the extension device as a relief from threatened insolvency, therefore, is not based upon the economic realities alone. As with so many business matters, it is also subject to the persuasiveness of the individual businessman.

It is worth noting that an informal extension is obtained in the case of trade credit whenever a buyer becomes a delinquent account. For reasons that have already been elaborated upon in the chapter on "Trade Credit," much greater informality surrounds the granting and servicing of this form of credit. Although suppliers have the legal right to force strict compliance with their credit terms, they usually do not do so because of very practical business considerations. As a consequence, a business unable to meet its trade debts can almost always count on an involuntary extension by merely postponing payment until some later date.

The particular disadvantage to this procedure as opposed to a formal extension, however, is that the borrower's credit standing is likely to suffer from such delinquency, whereas when a regular extension is obtained only the particular creditor involved is likely to know, and the credit reputation is protected. For this reason it is desirable whenever possible to pay off lesser creditors and seek a formal extension with one or a few major trade creditors with a plan for return to normal payments.

Since the typical small tradesman or manufacturer dodges the unpleasantness of seeking formal extension, the one who does approach his creditors with a plan for meeting his obligations is likely to receive special cooperation. He may be asked to give promissory notes to formalize the arrangement and to facilitate the later proof of debt should the creditor finally be obliged to take legal action to collect. Where the troubles are caused by losses of liquid resources so substantial as to require more than a short time to restore regular payments, a longer term extension or a composition of debts may be indicated. This more elaborate arrangement is discussed later in this chapter.

When help in the form of an extension or renewal cannot be relied upon from the creditor group, a business might turn to its owners, officers, or associates for an *emergency loan.* This is often the approach adopted when the lenders are not convinced of the temporary character of the plight or have become weary of continued cooperation. In order to avoid further weakening of its short-term credit standing, the business might also have to provide that these emergency loans be made subordinate in liquidation rights. Clearly, relief of this sort is largely dependent upon the existence of a rather closely held business organization with the principal owners closely identified with management.

Since one of the major explanations of a threatened insolvent condition is a deficient cash-generating ability due to a slowing up of the normal circuit flow of funds, relief might be sought through artificial acceleration of the flow. One of the most common forms is a forced sale of some or all of the inventory at reduced prices. So the familiar "fire sale," "closing-out sales," or even "clearance sales," which have the effect of increasing cash if not profits. Not always do these sales denote financial difficulty, but often the terms are used to hide the real reason for the accelerated cash generation.

Receivables might also be sold to a bank or finance company at a discount, and even fixed properties that are not absolutely essential to the operations might serve as a source of ready cash. These are most extreme methods, however, and should be reserved as a last resort. In every such case care should be exercised in selecting the particular property for sale. The temporary relief from cash strain when vital property is sold may not be worth the permanent damage done to the profit prospects of the company.

It might be possible to correct the situation by reducing cash drains for a limited period of time without resorting to any form of forced acceleration of cash receipts. One of the principal opportunities of this sort for a closely owned and managed business is with the owner-man-

agers' salaries. These may be either reduced in amount or eliminated entirely for a limited period of time. When this opportunity has been exploited to its fullest, further help may exist in the form of wage postponement from the employees, who, like the creditors, might stand to gain more than they lose in the long run by such cooperative assistance to the business. Although this source of help is limited to extreme and unusual circumstances, it has been availed of in the past and should not be ignored completely.

If the business has access to cash discounts in its purchase terms and has been taking them regularly, an easy way of protecting cash for a very restricted period of time is by sacrificing this discount and making use of the full credit period. In doing so, however, subsequent sacrifice of profitability will have to be accepted. Other possibilities of substituting deferred for immediate cash payment should also be investigated. But in all such cases as this it must be recognized that such devices are not salutary in themselves; they merely postpone the day of reckoning. Unless careful and objective planning indicates that the financial condition in the future will be able to care for the postponed payments, it would be preferable not to adopt the course, for the situation is merely aggravated thereby.

One final possibility should be mentioned. Sale of the entire business is often to be preferred to dogged attempts to avoid insolvency. When a business suffers from deficient liquid resources and financial backing but is otherwise a reasonably promising undertaking, stubborn resistance on the part of the owner may merely jeopardize his whole investment. If gradually run down through continued operating losses and forced into liquidation, the business will offer little to the owner-manager in the way of return of principal or opportunity for future business activity. Were he to sell the business to someone who was able to give it the financial support needed, he still might not get out all that he had invested, but it would be more than he could reasonably hope for by any other means. He might even be able to sell the major portion of his investment in the business and still maintain a part interest, but because of loss of operating control and inevitable conflict of authority such partial sale would generally be ill-advised.

On the surface it might seem contradictory to suggest sale of a business as a means of avoiding liquidation. But the logic of this rests on the economic fact alluded to in the introductory chapter that a business, like a horse, is worth more alive than dead. Selling the properties as an operating unit, to phrase it differently, will invariably provide a greater return than selling them piecemeal.

Remedies in Case of Insolvency

Once default on an obligation has occurred, action to prevent summary liquidation and dissolution of the business may range from very informal voluntary agreements to compulsory court action executed under statutory provisions. It is not too unusual, in fact, for a creditor not to press charges when default occurs and thereby grant automatic grace to the debtor. This would represent the ultimate in informal procedure. On the other hand, a plan might be worked out under court direction according to the provisions of the Federal Bankruptcy Act and would represent the opposite extreme. The following discussion will consider the various devices according to whether they are judicial or nonjudicial in approach. In every case some form of reorganization of the original capital structure results. That is to say, the need for some formal action as a result of the default is assumed.

Nonjudicial Debt Readjustments

Since the term reorganization generally connotes judicial procedure, nonjudicial action might be more appropriately referred to as "debt readjustment." These voluntary arrangements may take several forms. To begin with, *extension* of a maturity is just as appropriate in the case of realized insolvency as imminent insolvency. The same considerations hold as were brought out in the preceding discussion—particularly, hope for relief along this line depends largely upon the lack of cash being a temporary condition. The creditors would hardly benefit by postponing legal action if the situation was permanent or likely to get progressively worse. But when forced liquidation would result in the immediate shrinkage of economic value to the detriment of both creditors and owners, then, certainly, restraint and compromise on the part of the creditor groups are purest rationality.

In more serious cases where the difficulty is of a chronic sort, greater concessions might be asked of the creditor than that of postponing maturity. In nearly all such situations, however, there must be evidence to support the belief that there is a basic economic justification to the operation of the business. The terms of the loan agreement may be too harsh, or the amount of debt outstanding may be too large under the circumstances. Once these are brought into line, then it is reasonable to expect the company to hold its own without further complications of the same sort. Only under these assumptions would a creditor stand to gain more by making concessions than he would through exercise of his legal right.

Although not common, there have been cases of bondholders or other long-term creditors agreeing to a reduction in the contractual interest rate. Such a concession would almost have to be limited to a case where the debt constitutes the principal type of financing so that the sacrifice by the creditors would be more consistent with their own interests than those of the owners. That is to say, failure and forced liquidation would be more disastrous to the creditors dollar-wise. A more common procedure for meeting a situation of this sort, however, is to make the interest charge contingent on earnings rather than fixed. This is the explanation for most income bonds outstanding.

Default on a sinking fund provision of a bond indenture is technically grounds for court action, but generally in such cases the bondholders are more than willing to cooperate. Usually the default is merely ignored and no adjustment or corrective action taken. Where the provision seems overburdensome or not in keeping with the company's proven abilities, however, it is well to get the creditors to agree to a change. Often the indenture will even anticipate these less important difficulties by providing for revision of certain indenture provisions should a certain proportion of the bondholders, say two-thirds, give their consent.

Any of the concessions discussed thus far can sometimes be encouraged by offering the creditors a form of special reward over and above their hope for better treatment eventually than would result if they foreclosed now. An extension might be accompanied by an increase in the principal value of the debt or an increase in the coupon rate. A reduction of the coupon rate could be offset by increasing the principal value (though, of course, not in such proportions as to nullify the coupon decrease), by introducing a conversion privilege, or both. A change in some indenture provision might be counterbalanced by an off-setting change in another. For example, if a sinking fund provision is reduced or eliminated, dividend or working capital restrictions might be imposed.

One of the most extreme types of voluntary debt readjustments is that which provides for partial payment of a claim in complete satisfaction of the amount outstanding. A group of creditors, for example, might accept, say, 65 cents on the dollar in full settlement of their loan. So long as there are two or more creditors involved who agree to the plan, the act is binding upon those who join in the arrangement, and the relieved debtor cannot be held later on for the deficiency. The courts have decreed, however, that acceptance of such a plan by a single creditor is not binding, for he has received no consideration in return for his concession, and therefore the contract is not a valid one. When two or more creditors are involved, the concession of one is accepted as consideration to the other in enabling the arrangement to materialize.

This type of readjustment is commonly known as a "common-law composition" or just "composition." Because of the extreme nature of the concession it is practically limited in use to small businesses. In the first place, all the creditors involved must agree to the plan, or dissenters must be accommodated fully, according to the terms of the original contract. Such unanimity of approval requires that the creditors be fairly uniform in kind and few in number. Second, if the understanding and cooperation of the creditors are to be obtained, they must be familiar with the business and its management to a degree not generally feasible in large business debtor-creditor relationships.

Where creditors feel that compromise is in their best interests but are unable to have sufficient confidence in the existing management, a plan may be worked out whereby the operation of the business is taken over by a committee appointed by the creditors, some private agency organized for that purpose and hired by the creditors, or a trustee approved by the creditors. If and when the creditors' claims are settled and the business rehabilitated, control over operations is returned to the original owners. The creditors may prefer this type of informal treatment to court action because of its possibility of greater speed, greater economy, and less adverse publicity. The principal drawback is that the delegated authority is without legal recourse to enforce its recommendations, protect the business properties against dissipation, or deal with dissenting minorities. It can rely only upon practical business inducements in achieving these ends. Consequently, the greater chance of successful treatment of this sort is with reasonably small corporations and businesses, where the chief creditors are trade creditors desirous of rehabilitating a customer and the total number of creditors of all kinds is so small as to make general agreement on a course of action possible.

This idea raises a point which is most important to recognize in contemplating any form of voluntary treatment of an insolvent condition. The very informal nature of the procedure precludes any enforcing of the plan on recalcitrant individuals. The only way a plan can be effected if there are dissenters is to apply it only to those who are willing to accept it and continue to carry the others on the original basis. Thus if there is a reduction of the coupon rate, the dissenters will continue to receive the original amount; if there is a composition, those who dissent will have to be paid in full; or when an extension is generally agreed to, the opponents must be paid off immediately. Consequently, the use of any of these informal devices is contingent upon the willingness of practically all the creditors to conform. Should there be too many "holdouts," the company would be unable to accommodate them fully or the other creditors could not afford to accept such a difference in their own treat-

ment. The significance of this legal defect of the voluntary arrangements is pointed up by the fact that the general assignment of property for the benefit of creditors and other arrangements that may have to be adopted in working out a plan of debt readjustment may be construed by the courts as an act of bankruptcy and throw the proceedings under the jurisdiction of a Federal court. For all practical purposes, therefore, these informal remedies are largely restricted to those companies which have a limited number of creditors. That is why they are particularly suited to small businesses.

Judicial Reorganization

The final recourse available to a debtor in default short of outright liquidation and dissolution is reorganization of the financial structure under the supervision of some court of law. There are two possible approaches of this sort: (1) equity receivership and (2) reorganization under the Federal Bankruptcy Act. This latter, in turn, offers three alternatives, reorganization of corporations under chapter X, arrangements of unsecured debts of persons or corporations under chapter XI, and arrangement of real property claims of persons alone under chapter XII. The Act differs between "reorganizations" and "arrangements" on the basis of the complexity of the procedure required by virtue of the complicated character of the financial structure involved. Thus, unsecured debts of persons or corporations and secured debts of persons are "arranged" rather than "reorganized."

Discussion of the "equity receivership" device could well be ignored because of its obsolete character were it not for its historical significance in providing background to the present law. Prior to 1933, statutory provisions for the reorganization of businesses were lacking. Some states had laws on such matters as general assignments of title to assets for the benefit of particular creditors and other acts which touched on the subject, but no complete procedure had been codified. Since the Federal government had been given jurisdiction over bankruptcies under the Constitution, what is more, its deficiency in caring for the problem was particularly responsible for the void that prevailed.

One of the greatest lessons of business history is that when a basic need exists that either is not cared for or is opposed by the existing law, practical devices will be constructed that will supply the need as satisfactorily as possible. So it was with business reorganizations. Here, however, a device was not newly created but rather an existing one—namely, common-law receivership—was adapted to the peculiar business needs.

As in all such cases of improvisation, the procedure was not entirely satisfactory. It was often too cumbersome in application, was lacking in the power of enforcement, and provided too much opportunity for misuse and subsequent legal wrangling. Technically, action could be brought only by creditors, but debtor businesses were able to institute proceedings indirectly by arranging with cooperative creditors to file a petition for the appointment of a receiver. Often, too, the receiver appointed by the court following the filing of the petition and investigation of the claims was a member of the original management or a person closely associated with it. These "friendly" receivers, as they were called, came to be looked upon as one of the weaknesses of the procedure in that it served as a source of potential abuse.

Once the receiver was appointed, his essential duty was to administer the properties and protect them against unwarranted dissipation while a solution was being worked out. The business was placed under the protection of the courts, and creditors' claims were neutralized until some program could be devised that would operate to the benefit of all the creditors rather than the aggressive few who might get judgments for their claims to the detriment of the others. Although the initial impetus creating this status of a receivership was aimed at protecting the owners, its principal legal justification was in protecting general creditors against those who would receive preferential treatment merely by virtue of their being quicker to act or less scrupulous in their concern for others.

The actual formulation of the reorganization plan was left to committees representing the various classes of claimants. Any committtee could present a plan of its own, but the final plan was ordinarily the product of bargaining among the various committee representatives brought together on a central reorganization committee. This procedure gave rise to another possible abuse. Since there was no formal routine established to be followed in every case, there was always the possibility of certain groups being better represented than others and participating in the reorganization out of proportion to their strict legal claim. Since some security holders, particularly those closely related to the management of the business, also had more ready access to the names of their fellow investors they had an advantage in forming committees and securing backing in numbers.

The complications involved in reaching general agreement of the type required, particularly in the case of complicated capital structures of large corporations, such as the railroads, were a weakness of the device in itself. But the difficulties went beyond this. Because the plan was without legal authority, it could not be invoked by law but had to be

consummated through the subterfuge of a foreclosure sale. An "upset price" would be established and approved by a court which would constitute the figure below which a sale would not be consummated. The manner of participating in the proceeds from the sale by the different investor groups was provided by the reorganization plan. At the sale, a single class of security holder or a person to whom had been assigned the rights of different classes of securities would bid for the property and give the securities as payment. With this advantageous method of compensation there was little danger of being outbid by an outsider, who would have to pay cash, and so the entire business would be acquired at the predetermined upset price. Thus, the foreclosure sale provided the legal means for achieving a transfer of ownership, and the reorganization plan merely prescribed the way in which the new ownership would be distributed among the original investors.

Two drawbacks existed in this roundabout approach. First, the upset price provided a basis for possible abuse. Too low a price would squeeze out too much value to the detriment of some junior security holders; and too high a price would fail to remedy the situation and protect too many of the investors. In the second place, the method lacked legal force, and as a consequence the plan was continually subject to attack by dissenters preparatory to the foreclosure sale, and the resulting reorganization was often the basis for drawn-out litigation afterward. Complaints were leveled against such things as the inequity of the upset price and the exorbitant fees and imprudence or fraud of the committee managers. The very nature of the operation tempted abuse, for a very low upset price was a likely way to discourage dissenters and accelerate acceptance of a plan.

In 1933 and 1934 the Federal Bankruptcy Act of 1898 was amended to provide formally for a new reorganization procedure of failed businesses. Further important amendments were made in 1938. Although equity receiverships are still available for use, being a common-law development, they have been almost entirely supplanted by these later amendments, namely, chapter X, chapter XI, and chapter XII.

Reorganization under chapter X *of the Bankruptcy Act* is designed for major corporate structures and those which have secured obligations.[1] Technically, a corporation cannot seek relief under this chapter unless it cannot make adequate use of the more simplified approach of chapter XI. In fact, in filing a petition under chapter X the company must explain clearly why the easier approach is not open to it. This petition may be

[1] Railroads are covered by a separate section in the Act (77b) and are excluded from treatment here because they offer no special problems of financial principle.

submitted by the debtor corporation itself, in which case the action is known as a "voluntary reorganization" procedure. If creditors initiate action through a petition, it is called an "involuntary reorganization." Three or more creditors with aggregate claims of $5,000 or more are needed for this latter approach. An indenture trustee acting in behalf of the bondholders can also institute involuntary proceedings.

Once the petition is approved, a court representative is selected to administer the properties in the same manner as the equity receiver and at the same time work toward the formulation of an acceptable plan of reorganization. If the aggregate claims against the business are $250,000 or more, the judge under whose authority the case falls must appoint a disinterested trustee. If the total liabilities are less than this sum, he may permit the old management to continue to exercise operating control or appoint a disinterested party as he sees fit.

The major difference between the work of this trustee and the equity receiver is that he is responsible for the actual formulation of the reorganization plan. Interested parties can submit plans or recommendations of their own, and committees representing the different security holders still function. But all of these activities are mainly advisory in nature. Once the plan or plans are submitted, they are opened to a hearing and the making of counterplans and proposals. In some larger cases the Securities and Exchange Commission (SEC) is required to be called upon to study the situation and make an advisory report. Finally, the court reviews the various plans and their supporting amendments and recommendations and approves those which conform to the law and are deemed to be "fair and equitable" and "feasible." Once approved, they are submitted to the affected security holders for acceptance or rejection. For any plan to be accepted it must be approved by at least two-thirds of the creditors in each category that has been created and a majority of the stockholders if the company has not been found actually insolvent. Where the company is actually insolvent (as opposed to technically so), only acceptance by the creditors is required. In the end, one plan will be accepted by the security holders and returned to the court for final confirmation. A time limit within which final acceptance of a single plan by the security holders must be made is set by the court when it originally refers a plan or plans to them after approval, in order to avoid continued postponement and prolonged litigation.

Once accepted, the plan is confirmed by the court and ordered into effect. Because of the legal authority under which it has been formulated, the plan when confirmed in this way becomes binding upon all dissenters. Thereafter, the debtor is discharged from all its original obligations, and

the new corporation is free to continue operations alone subject to the capital structure established under the plan.

Arrangements under chapters XI *and* XII *of the Bankruptcy Act* are used in less serious and complicated situations of failure. As indicated earlier, the law even provides that relief under chapter X shall be provided only where it can be shown that help cannot be secured under chapter XI. For the most part, however, these statutory arrangements are used by relatively small businesses and are the legal counterparts to the nonjudicial devices described earlier in this chapter. In essence they can be regarded as old-fashioned "compositions" which have the authority of law behind them.

Evidence of this principal usage by small business is provided by the data of Table 1.[2] Of the 1,143 petitions filed during the four years, 1946

TABLE 1

CHAPTERS XI AND XII BANKRUPTCY PETITIONS FILED, 1946 TO 1949 BY SIZE OF LIABILITY PER CONCERN

Size of liability per concern	1946		1947		1948		1949	
	No.	Per cent	No.	Per cent	No.	Per cent	No.	Per cent
Under $5,000 . . .	2	2.6	5	1.8	1	0.3	10	2.2
$5,000–$24,999 . .	6	7.8	42	14.9	81	24.7	106	23.2
$25,000–$99,999 . .	32	41.6	119	42.3	128	39.0	227	49.7
$100,000–$999,999 .	35	45.4	103	36.7	110	33.5	107	23.4
$1,000,000 and over	2	2.6	12	4.3	8	2.5	7	1.5
Total—all sizes .	77	100.0	281	100.0	328	100.0	457	100.0

to 1949, 66.4 per cent represented companies having aggregate liabilities less than $100,000; and only 29, or 2.5 per cent, of the companies had liabilities in excess of $1,000,000. It appears, too, that as business failures increase in number, the reliance of small business upon these devices increases relative to that of large. The likely explanation is that the small business community is the one more affected by changes in the general business climate, that is, the proportion of small business failures is increased.

[2] This information was compiled by the Business Information Division of Dun and Bradstreet, Inc., and generously made available to the present authors.

Additional interesting information about the use of chapter XI and XII arrangements is contained in Table 2.[3] Though important in the

TABLE 2

EXTENT OF USE OF CHAPTERS XI AND XII DURING THE YEARS 1946 TO 1949

Year	Total failures	Petitions filed under chaps. XI and XII	
		Number	Per cent of total failures
1946	1,129	77	6.8
1947	3,474	281	8.1
1948	5,250	328	6.2
1949	9,246	457	4.9
Total . . .	19,099	1,143	5.9

sense of being available as alternative means of coping with an insolvent situation, they are not used widely by businesses in difficulty. In only one year of the four from 1946 to 1949 did their use equal 8 per cent of total failures for the year. And the 1,143 petitions filed under the provisions of one or the other of these two chapters during the four-year period amounted to only 5.9 per cent of the total business failures. The interesting implication is that the overwhelming majority of small businesses which fail are liquidated. It is interesting to note further that according to the Dun and Bradstreet office supplying these data, "the cases [filed] are predominantly chapter XI's" rather than chapter XII's.

The procedures followed under chapters XI and XII provisions parallel one another very closely. The essential difference between the two is that chapter XI provides for "the settlement, satisfaction, or extension of the time of payment" [4] of the *unsecured* debts of any *corporation* or individual, whereas chapter XII has to do with "the alteration or modification of the rights of creditors or of any class of them, holding debts secured by real property or a chattel real" [5] of which a person other than a corporation is the legal owner. In other words, chapter XI deals with unsecured

[3] This information was compiled by the Business Information Division of Dun and Bradstreet, Inc., and generously made available to the present authors.

[4] Article II, sec. 306.

[5] Article II, sec. 406.

debts only, but of either corporations or individuals; chapter XII, on the other hand, covers real-property arrangements only for persons other than corporations. Default on secured debts of corporations would require treatment under chapter X. It should also be noticed that by omission no special relief is provided partnerships, although they may petition for bankruptcy under the general provisions of the Act.

Since the procedural provisions of the two chapters are very similar, and yet, as was indicated by the above quotation from Dun and Bradstreet, chapter XI is the one more often used, brief attention will be given to its major features only. There are several points of major difference from chapter X. In the first place a petition must always be filed by the debtor. No provision is made for involuntary proceedings initiated by creditors or others. However, the debtor is free to file a petition even after being committed to bankruptcy.[6] In the second place, the court may or may not appoint a trustee to administer the properties while a plan is being worked out. If no such trustee is appointed, the original management will remain in possession. In all such cases, however, the court may require a surety bond to protect creditors against unwarranted dissipation of the properties.

The plan itself must be formulated by the debtor and accompany the filing of the petition. Thereafter appraisers may be hired to evaluate the property involved. Finally, creditors are notified of the proposed plan, are instructed to file claims, and are requested to submit written acceptance of the plan if they so choose. If all creditors agree to the arrangement, it may be confirmed by the court immediately. If there are dissenters, then an application for confirmation must be submitted to the court. This action is permissible, however, only when the plan has been accepted by a majority of the creditors in number and amount. Once the court finally confirms a plan it becomes binding upon all creditors, whether agreeable to the arrangement or not, and the debtor is relieved of the original obligations to the extent they are affected by the plan.

Summary

This chapter has been concerned with action that a businessman might take when faced with certain forms of financial strain or failure. In all such cases the extent of the difficulty varies in degree, and the opportunities for relief change accordingly. The least serious situation is one in which there is no danger of default upon an obligation, but the company suffers from financial strain nonetheless in the sense that its financing

[6] This does not hold true for chap. XII, however.

ability is impaired. The prime example of this is dividend coverages on cumulative preferred stock. This defect may be in the short-term credit sphere or the long-term investment sphere, or both. Under such circumstances the only hope for relief is to get rid of the detracting financial condition through some voluntary alteration of the financial structure or the legal rights thereunder.

A more serious difficulty is where insolvency is threatened because of improvident financing in the past or changed conditions which frustrated plans. Where past financial commitments have not been carefully entered into according to plans or original plans have not materialized, some voluntary concessions on the part of the creditors may be sought. An alternative to this is to accelerate receipts by means of a forced liquidation of assets or reduce cash drains through a temporary contraction of certain cash disbursements. In any case, the hope for success is largely dependent upon the difficulty being of a temporary rather than a chronic sort. To attempt to relieve a chronic difficulty by any of the latter two means would merely result in an aggravated condition.

Finally, should a business actually reach the point of default on an obligation and action be pressed by the creditors, some form of reorganized financial structure must be worked out. This may be accomplished by legal or nonlegal means. Because of the complications attached to successful culmination of the nonlegal arrangements, they are largely restricted to smaller businesses. Businesses, both large and small, seeking help under law may petition for reorganization under chapter X of the Bankruptcy Act if incorporated or for arrangement under chapters XI and XII if the situation is not so complicated.

To be successful in any relief of a financial difficulty, it is imperative that the basic causes be isolated. Unless the plan deals effectively with these sources of trouble, relief will be short-lived and the chances for renewed trouble in the future will be present. Furthermore, in view of the essentially legal character of the subject most action reviewed here should be taken only after consultation with a qualified attorney at law. A businessman, however, should be qualified to judge the extent of the financial difficulty and be able to appraise the financial merit of any procedure submitted for his approval. It is not that he should be a legal authority, merely that he should not be a legal illiterate in his field of endeavor.

Questions

1. Differentiate between financial strain, imminent insolvency, and failure.

2. What are some common evidences of financial strain, and what remedies might be employed in the case of each?
3. What are the particular advantages that may be obtained from the act of debt consolidation?
4. What is the meaning of the term recapitalization? Illustrate how a type of recapitalization may be helpful to a company suffering from financial strain.
5. What are some of the principal ways of attempting to deal with a situation of imminent insolvency?
6. Why would a creditor ever consent to an extension when he has the legal right to demand payment when due?
7. Explain in some detail what takes place in a common-law composition, and state the circumstances under which such a remedy might be practical.
8. What are some other forms of nonjudicial debt readjustments that might be used in the event of unavoidable default?
9. Summarize briefly the procedure that was followed in accomplishing a business reorganization prior to the passage of the amendments to the Federal Bankruptcy Act.
10. Describe the essential aspects of the reorganization procedure under chapter X of the Bankruptcy Act amended.
11. Differentiate between chapters X, XI, and XII.

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